وزارة التعليم العالي والبحث العلمي
جامعة بن يوسف بن خدة – الجزائر
كلية الآداب واللغات
قسم اللغة العربية وآدابها

الصوامت الشديدة في العربية الفصحى

دراسة مخبرية

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إعداد:
رضـا زلاقـي

إهداء

إلى روح والدي الكريم: تغمده الله بواسع رحمته ...

إلى الأم الغالية: متعها الله بالصحة والعافية ...

وإلى كل من يشعل شمعة ..بدل أن يلعن الظلام...

أهدي ثمرة هذا العمل

* شكر وتقدير *

** أحمد الله تعالى العلي القدير على أن وفقني وأعانني على إتمام هذا العمل من غير حول مني ولا قوة ، فهو الذي له الفضل أولا وأخيرا..

** كما أتوجه بشكري الجزيل إلى أستاذي الفاضل " **عبد المجيد سالمي** " الذي رافقني طيلة هذا العمل بالنصيحة والتوجيه والإرشاد..

** وشكر خاص إلى أستاذتي الكريمة " **تسعديت حاوش** " التي كانت لي خير معين في هذا البحث..

** كما لا أنسى الدكتورة " **خولة طالب الإبراهيمي** " التي قبلت الإشراف على هذا الموضوع، وكان لها فضل توجيهي إلى تناوله..

وأشكر المهندس "عمار**" والأستاذ "**هارون الرشيد**" اللذين ساعداني بدورهما في إتمام هذه الدراسة..

**وثناء كبير لكل من مد لي يد العون والمساعدة في هذا العمل، ولو بكلمة طيبة ..

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[illegible]

[illegible]

- 1 [illegible]
- 2 [illegible]
- 3 [illegible]
- 4 [illegible]
- 5 [illegible]

[illegible]

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[illegible]

[illegible]

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2 [illegible]

3 [illegible]

4 [illegible]

[illegible]

øŁ

* ا لفصل الأول*

مفاهيم أساسية في الصوتيات

المبحث الأول : الصوتيات: مفهومها وفروعها و أهميتها .
المبحث الثاني : نبذة عن الدرس الصوتي العربي قديما .
المبحث الثالث : الصوت اللغوي .
المبحث الرابع : تصنيف الأصوات العربية .

المبحث الأول

الصوتيات: مفهومها وفروعها وأهميتها

المطلب الأول: مفهوم الصوتيات.

المطلب الثالث: فروعها.

المطلب الثالث: أهمينها.

المبحث الأول: الصوتيات: مفهومها وفروعها وأهميتها.

[illegible]

[illegible]

[illegible]

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3 [illegible] 1997 [illegible] 65.

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5 [illegible].

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.[8] [illegible]

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[illegible]
[illegible]
... [illegible]
[illegible]
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7- [illegible] 67.
8- [illegible].
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11 - [illegible] .2004

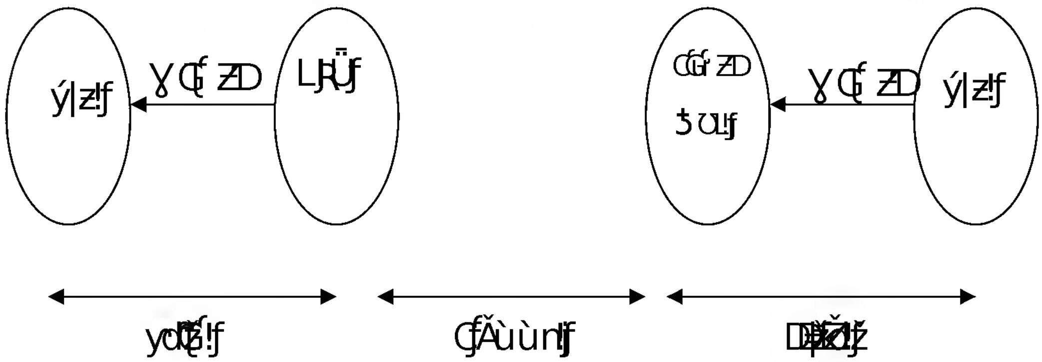
12 - [illegible] .103

13 - [illegible] 2000 [illegible] .66

Lyons John , Linguistics , penguin books, 1972, p 21.-4

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Articulatory phenotics [illegible]

[illegible]

15 [illegible] 45.

16 [illegible] 8.

17 [illegible]

Acoustic or physical phonetics

18- [illegible] .47/46

19- [illegible] .44

20- [illegible] .19

21- [illegible] .103

22- [illegible] .19

[23]

[24]

Audiotory phonetics

/b/

/sabt/ /tibr/

23- .104

24- .49

[illegible] [25]«/billa:h/:! [illegible] /alla:h/ ! [illegible]

[illegible]

[illegible].

[illegible] .[26]«[illegible]

[illegible] .[27]«[illegible]

[illegible] [28]«[illegible] .[illegible]

instrimental or laboratory **[illegible]** **phonetics**

[illegible] .[29]«[illegible]

.104/103 [illegible] -25

.44 [illegible] 26

.44 [illegible] -27

.45 [illegible] 28

.54 [illegible] -29

[illegible]

Lyons John , New horizons in linguistics , 1969 ,Cambridge ,p110-1

31- [illegible] .55

32- [illegible] .56/55

33- [illegible] .7

[illegible]

[illegible]

[illegible]

[illegible] [34] [illegible]

[illegible] [35]

[illegible]

[illegible]

34- [illegible] 2003 [illegible] .198

35- [illegible] 1997 [illegible] .104

36- .577
37- .597/587
38- .409/401
39- .616/612
40- .62

المبحث الثاني

نبذة عن الدرس الصوتي العربي قديما.

المطلب الأول: المفهوم والنشأة.

المطلب الثاني: جهود العرب القدامى في مجال الدرس الصوتي.

المطلب الثالث: أهم جوانب الدرس الصوتي عند العرب القدامى.

المبحث الثاني: نبذة عن الدرس الصوتي العربي قديما.

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42- [illegible].

43- [illegible] 15.

44- [illegible] 1998 [illegible] 50.

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45- [illegible] 41/42.

46- [illegible] 48.

47- [illegible] 67/68.

[illegible]

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[illegible].[49]

[illegible].[50]

[illegible].[51]

48- [illegible] 38.

49- [illegible] 81.

50- [illegible] 1998 [illegible] 32.

51- [illegible] 16.

[illegible] [59] [illegible]

[illegible] [60] [illegible]

[illegible] [61] [illegible]

[illegible]

58- [illegible] .67

59- [illegible] .124/123

60- [illegible] .129

61- [illegible] 1979 [illegible] .135

[illegible].[62]

[illegible].[63]

[illegible].

62 [illegible] 63.

63 [illegible] 43.

المبحث الثالث

الصوت اللغوي.

المطلب الأول: مفهوم الصوت في الفيزياء وخصائصه.

المطلب الثاني: مفهوم الصوت اللغوي.

المطلب الثالث: خصائصه .

المبحث الثالث: الصوت اللغوي.

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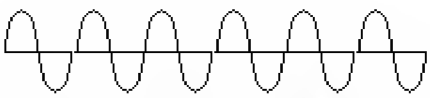
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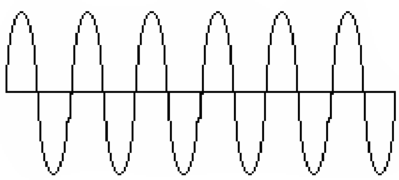
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[illegible]

70- [illegible] .121
71 [illegible] .116
72 [illegible] .30
Malmberg Bertil :Phonetics , 1963, new yourk , p08.-4

[illegible]

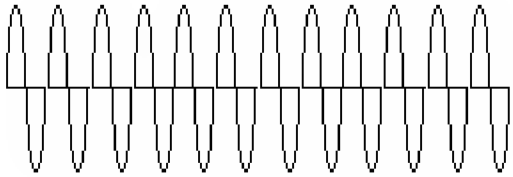
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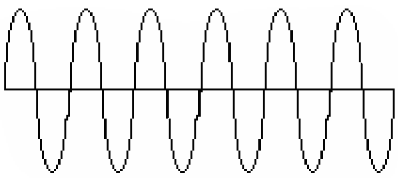
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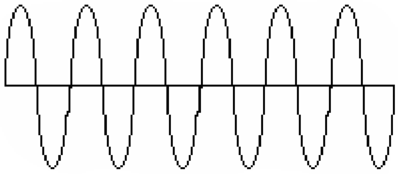
2- [illegible] 30.

3- Okett Charles ,A manual of phonology , international journal of American liguistics , october 1975. p172.

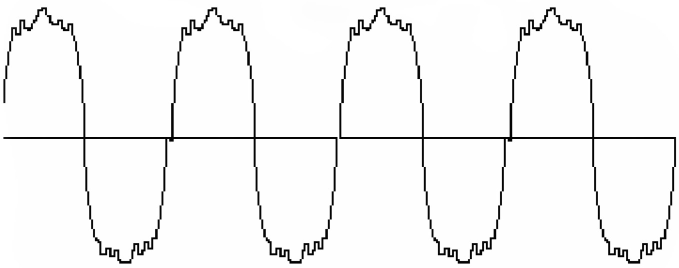
4- [illegible] 30

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[77] [illegible]



([illegible])



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1- [illegible] .121

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[illegible]

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78- [illegible] 85.

79- [illegible] 119.

80- [illegible] 111.

[illegible]

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81 [illegible] 1985 [illegible] 6.

82 - [illegible] 431 [illegible].

[illegible]

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1 [illegible]

[illegible] [84]

2 - [illegible]

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3 - [illegible]

[illegible] [86]

4 - [illegible]

5 - [illegible]

[illegible] [87]

[illegible]

6 [illegible]

[illegible]

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83 - [illegible] 130.

84 - [illegible] 131.

85 - [illegible]

86 - [illegible] 132.

87 - [illegible]

[illegible] .[88]

7 - [illegible]

[illegible] .[89]

[illegible]

88- [illegible] .133/132

89- [illegible] . 133

المبحث الرابع
تصنيف الأصوات العربية.

المطلب الأول: معايير التصنيف.
المطلب الثاني: الأصوات الصائتة (الحركات)في العربية.
المطلب الثالث: الأصوات الصامتة في العربية.

المبحث الرابع: تصنيف الأصوات العربية.

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2- [illegible] Consonants [illegible] [92].

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90- [illegible] 149/150.

91- [illegible] 124.

92- [illegible] 130.

93- [illegible] 589 .

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94- [illegible] 153 .

95- [illegible] 155 .

96- [illegible] 2001: [illegible] 19 .

1 -

2 -

1 -

97 - 124.

98 - 2003 : 199.

99 - 226.

2- [illegible]:

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3- [illegible]:

[illegible][100].

[illegible]

[illegible]

100- [illegible].

1 - normal speeck

2 -

3 -

4 -

5 -

101 - .124

102 - .58

103 - .198

6 - [illegible] [104].

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2 - [illegible].

3 - [illegible].

4 - [illegible].

5 - [illegible].

6 - [illegible].

7 - [illegible].

8 - [illegible].

9 - [illegible].

10 - [illegible].

11 - [illegible] [106].

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104 - [illegible] 199.

105 - [illegible] 101.

106 - [illegible] 203/202.

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1- [illegible]
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2- [illegible]
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3- [illegible]
[illegible]

4- [illegible]

5- [illegible]

6- [illegible]

7- [illegible] »[107]

[illegible]

[illegible] « momentary »[108] [illegible]

[illegible]

107- [illegible] 203/204.

2- Martinet Ander ,Elements of general linguistics , 1964, London p57

ا لفصل الثاني

الصوامت الشديدة عند العرب القدامى

المبحث الأول : أساليب العرب القدامى ووسائلهم المستعملة في الدرس الصوتي .

المبحث الثاني: جهاز النطق عند العرب القدامى .

المبحث الثالث: الصوامت الشديدة : مخارجها وصفاتها عند العرب القدامى.

المبحث الأول

أساليب العرب القدامى ووسائلهم المستعملة في الدرس الصوتي.

المطلب الأول: المعرفة العلمية عند العرب القدامى.

المطلب الثاني: أساليب العرب القدامى ووسائلهم المستعملة في الدرس الصوتي.

المبحث الأول: أساليب العرب القدامى ووسائلهم المستخدمة في الدرس الصوتي.

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1- [illegible]

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110- [illegible] 58

111- [illegible]

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112- [illegible] ص60.

113- [illegible].

114- [illegible]: 01.

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2- 116 [illegible] .62

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[115] [illegible] [116]

112- [illegible] .84

113- [illegible] .81

114- [illegible] .9/8

115- [illegible] 1982 [illegible] .6

116- [illegible] 1992 [illegible] .253

[illegible] .[117]

[illegible] .[118]

[illegible] .[119]

[illegible] .[120]

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117- [illegible] 16 .

118- [illegible] 57 .

119- [illegible] 16 .

120- [illegible] 67 .

المبحث الثاني

جهاز النطق عند العرب القدامى.

المطلب الأول: مفهومه.

المطلب الثاني: أعضاؤه.

المبحث الثاني: جهاز النطق عند العرب القدامى.

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[illegible]

[illegible]

[illegible] [122] [illegible]

[illegible] [123] [illegible]

121- Brosnahan F ,Introduction to phonetics . 1970.Cambridge ,p 29.

122- [illegible] 1967 [illegible] .47

123- [illegible] 9 /8.

[illegible] [124] [illegible]

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[illegible] [126] (538 [illegible]) [illegible] [125] [illegible]

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124- [illegible] 1358 [illegible] 251.

125- [illegible] 45.

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127- [illegible] 1995 [illegible] 461.

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129- [illegible] 1995 [illegible] 121.

130- [illegible] 1987 [illegible] 276.

131- [illegible] 1986 [illegible] 96.

132- [illegible] 1998 [illegible] 67.

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1- [illegible]

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2- [illegible]

[illegible][139] [illegible][140]

134- [illegible] .71
135- [illegible] .58 - 57
136- [illegible] .435
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4- [illegible]:

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141- [illegible] 434.

142- [illegible] 46/ 47.

143- [illegible] 52/57/58.

144- [illegible] 434.

145- [illegible] 814.

146- [illegible] 73.

5 -

147 - .58
148 -
149 -
150 - .52
151 - .433
152 - .47
153 - .54
154 - .52
155 - .58
156 -

6-

165- .52

166- .51

167- .30 /27

168- .433

169- .434

170- .8

171- .47

172-

173- .80

7- [illegible]

[illegible]

[illegible] [174].

[illegible] [175].

[illegible] [176]

[illegible]

8- [illegible]

[illegible] [177] [illegible]

[illegible] [178].

[illegible] [179].

[illegible]

174- [illegible] 51.

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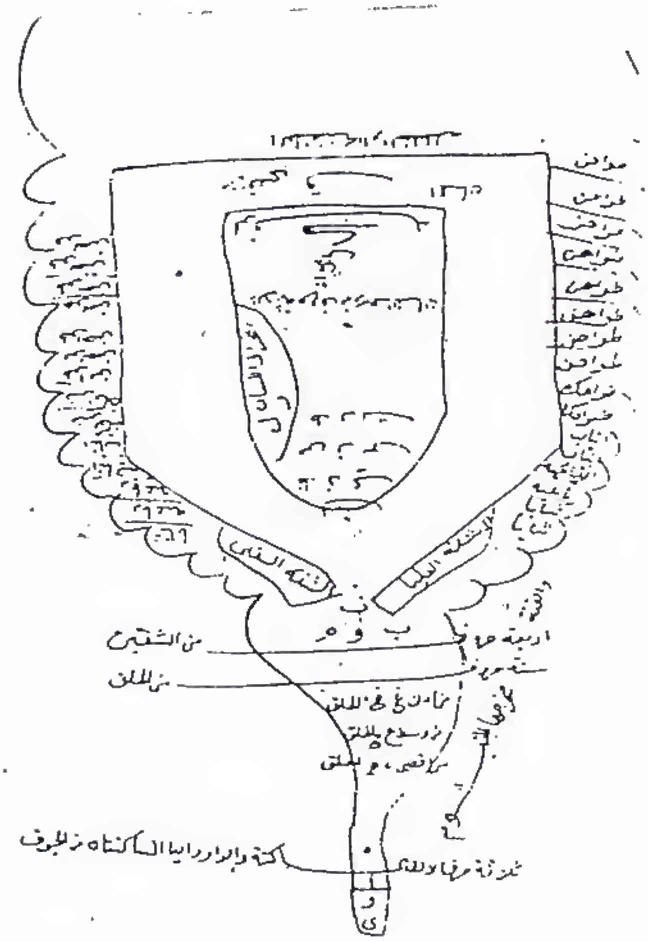
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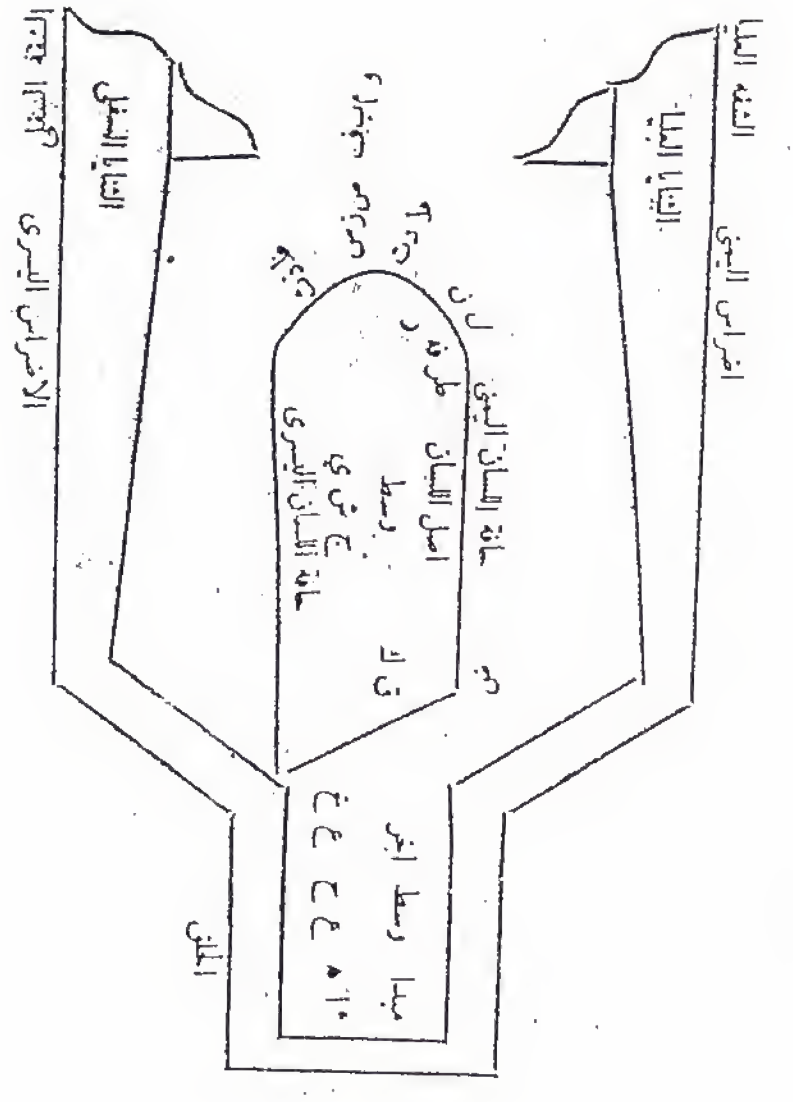
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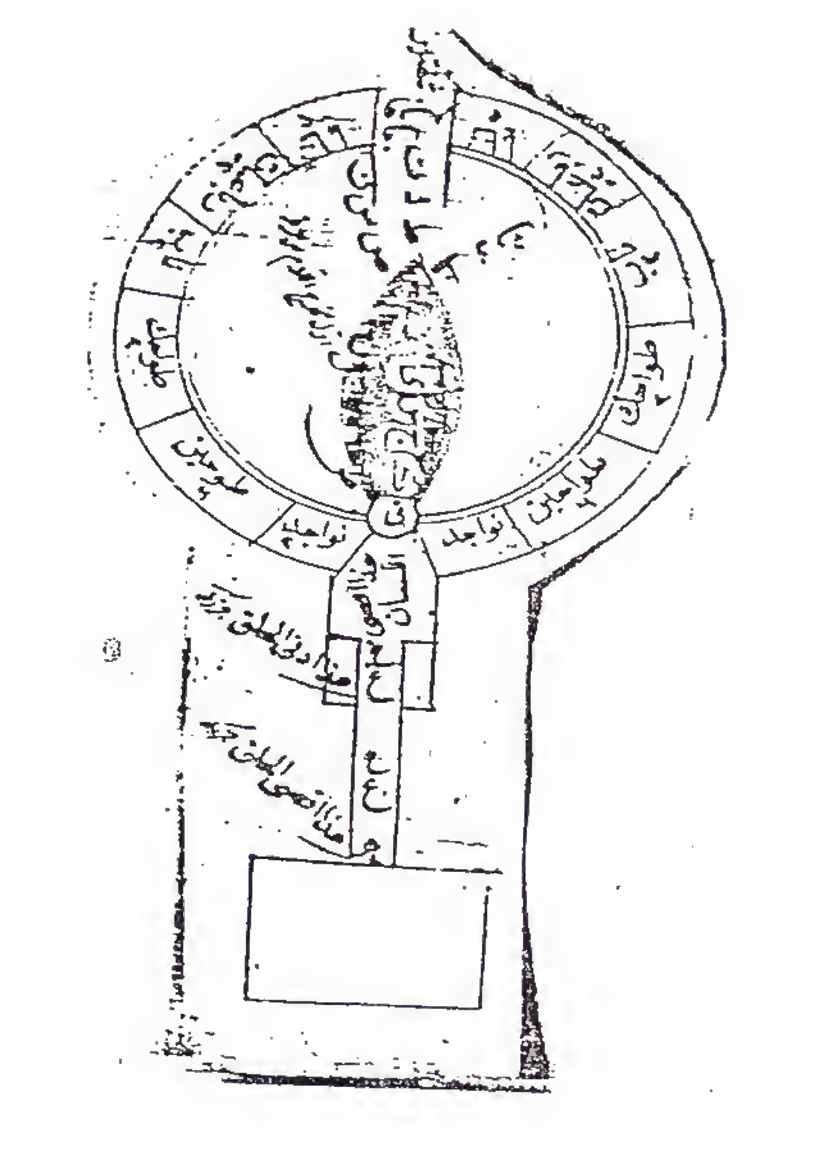
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182 [illegible] 87.



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183 ǓƼǕǕǓǖ ǕǗǕǖ، ǕǖǓ .06



[illegible]

[illegible] [184] (1019)

184 [illegible] .90

المبحث الثالث

الصوامت الشديدة: مخارجها وصفاتها عند العرب القدامى.

المطلب الأول: المخرج والصفة.

المطلب الثاني: مفهوم الشدة.

المطلب الثالث: مخارج الصوامت الشديدة.

المطلب الرابع: صفات الصوامت الشديدة

المبحث الثالث: الصوامت الشديدة: مخارجها وصفاتها عند العرب القدامى.

[illegible] .[194]

[illegible]

[illegible] [195] [illegible] [196] [illegible] [197] [illegible]

2- [illegible]:

[illegible] [198] [illegible] .[199]

[illegible] .[200]

[illegible] [201] [illegible]

194 [illegible] 6.

195 [illegible] 198.

196 - [illegible] 433.

197 [illegible] 198.

198 - [illegible] 18.

199 [illegible] 356.

200 - [illegible] 431.

201 [illegible] 60.

[illegible]
[illegible] .[202]

[illegible]
[illegible] .[203]

[illegible]
[illegible] .[204] [illegible]
[illegible] .[205]

[illegible]

202- [illegible] .547

203- [illegible] .464

204- [illegible] 1996 [illegible] 1 [illegible] 114

205- [illegible] 1391 [illegible] 1 [illegible] .169

[illegible]

[illegible] [206] ...

[illegible] [207]

[illegible] [208]

[illegible] [209]

[illegible] [210] [illegible] [211] [illegible] [212] [illegible]

[illegible] [213]

[illegible] [214] [illegible]

206- [illegible] ص 232.

207- [illegible] ص 434.

208- [illegible] ص 194.

209- [illegible] ص 116.

210- [illegible] ص 61.

211- [illegible] ص 395.

* [illegible]

212- [illegible] ص 109.

213- [illegible] ص 60.

214- [illegible] ص 434.

[illegible] [215]

215- [illegible] 117.

المطلب الثالث: مخارج الصوامت الشديدة.

[illegible] [216] [illegible]

[illegible] [217] [illegible]

[illegible]

1- [illegible]:

[illegible] [218] [illegible] [219] [illegible] [220]

[illegible] [221] [illegible] [222] [illegible] [223] ...

[illegible] [224]

2- [illegible]

[illegible] [225] [illegible] [226]

[illegible] [227]

216- [illegible] 109.

217- [illegible] 1996: [illegible] 5.

218- [illegible] 1964 [illegible] 44.

219- [illegible] 6.

220- [illegible] 433.

221- [illegible] 64.

222- [illegible] 393.

223- [illegible] 192.

224- [illegible] 6.

225- [illegible] 65.

226- [illegible] 433.

[illegible] [228] [illegible].

3- [illegible]

[illegible] [229] [illegible]

[illegible] [230].

4- [illegible]:

[illegible] [231] [illegible] [232] [illegible] [233] [illegible] [234] [illegible] [235].

5- [illegible]:

[illegible] [236] [illegible]

228- [illegible] 967 [illegible] .48
229- [illegible] .814
230- [illegible] .433
231- [illegible] .47
232- [illegible] .65
233- [illegible] .433
234- [illegible] .47
235- [illegible] .394
236- [illegible] .124
236- [illegible] .357

[illegible].[237]

[illegible].[238]

6- [illegible]:

[illegible]

[illegible].[239]

[illegible]:

[illegible][240] [illegible]

[illegible].[241]

[illegible][242] [illegible].[243]

237- [illegible] 433.

238- [illegible] 47.

239- [illegible] 65.

240- [illegible] 433.

241- [illegible] 106.

242- [illegible] 7.

243- [illegible] 48.

المطلب الرابع: صفات الصوامت الشديدة.

[illegible]

[illegible]

1- [illegible]:

[illegible] [244]

[illegible] [245] [illegible] [246]

[illegible] [247] [illegible] [248] [illegible] [249] [illegible] [250]

244- [illegible] 150.

245- [illegible] 434.

246- [illegible] 109.

247- [illegible] 197.

248- [illegible] 8.

249- [illegible] 109.

250- [illegible] 434.

2- الهمس

[illegible][251] [illegible][252].

[illegible][253] [illegible][254] [illegible][255] [illegible][256].

[illegible][257].

[illegible][258] [illegible][259].

[illegible][260] [illegible][261].

2- [illegible]:

[illegible][262].

251- [illegible] .105

252- [illegible] .250

253- [illegible] .434

254- [illegible] .60

255- [illegible] .395

256- [illegible] .201

257- [illegible] .194

258- [illegible] .109

259- [illegible] .109

260- [illegible].

261- [illegible] .434

[illegible]

4- [illegible]:

[illegible]

5- [illegible]:

---

262 [illegible] 209 / 210.

263- [illegible] 434.

264 [illegible] 61.

265 [illegible] 8.

266- [illegible] 133/134.

267- [illegible] 436.

268 [illegible] 536.

269- [illegible] 137.

270- [illegible] 436.

[illegible] [271] [illegible]

[illegible] [272] [illegible]

[illegible] [273] [illegible]

[illegible] [274] [illegible]

[illegible] [275] [illegible]

6 - [illegible]:

[illegible] [276] [illegible]

[illegible] [277] [illegible]

[illegible] [278] [illegible] [279] [illegible] [280] [illegible] [281] [illegible]

---

271 [illegible] 5 [illegible] 83.

272 [illegible] 57.

273 [illegible] 4 [illegible] 128 – 129.

274 [illegible] 62.

275 [illegible] 295.

276 [illegible] 1 [illegible] 337.

277 [illegible] 51.

278 [illegible] 62.

279 [illegible] 1969 [illegible] 21 [illegible]

[illegible] [282] [illegible] [283] [illegible]

7- [illegible]:

[illegible] [284] [illegible] [285] [illegible] [286] [illegible] [287] [illegible] [288] [illegible]

280- [illegible] 395.

281- [illegible] 110.

282- [illegible] 130.

283- [illegible] 140.

284- [illegible] 566/ 567.

285- [illegible] 174.

286- [illegible].

287- [illegible] 51.

288- [illegible] 295.

[illegible][289] [illegible]
[illegible].

[illegible]
[illegible]:

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

289- [illegible] 154.

ا لفصل الثالث

الدراسة المخبرية للصوامت الشديدة.

المبحث الأول : المخبر الصوتي ووسائله .
المبحث الثاني : الدراسة الفيزيولوجية للصوامت الشديدة .
المبحث الثالث : الدراسة الفيزيائية للصوامت الشديدة .

المبحث الأول

المخبر الصوتي ووسائله.

المطلب الأول: المخبر الصوتي.

المطلب الثاني: الآلات الفيزيولوجية في المخبر الصوتي.

المطلب الثالث: الآلات الفيزيائية.

المبحث الأول: المخبر الصوتي ووسائله .

290- ... 1988 ... 36.

291- ... 1999 ... 188.

1

Kymograph 1

[illegible]

292 - [illegible] 1998 [illegible]

86

293 - [illegible] 1989 [illegible]

[illegible]
[illegible]
[illegible] «[illegible].[294]

[illegible] Laryngoraph:

»[illegible]
[illegible]
[illegible] Sound [illegible]
[illegible]
«[illegible].[295]

3- [illegible] Artificial Plates [illegible][296]

»[illegible]
[illegible] (Palatography) [illegible]
[illegible]
[illegible]
[illegible]
[illegible]:

- [illegible].
- [illegible].
- [illegible].

[illegible]
[illegible]
«[illegible][297]
[illegible]
[illegible]:

294- [illegible] 56/57/58.
295- [illegible] 59.
296- [illegible] 101.
297- [illegible] 60.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] [298]

[illegible] 4»:

[illegible] :X-Ray [illegible]

[illegible] X [illegible] [299]

[illegible] [300]

298- [illegible] 62/63.

299- [illegible] 63.

300- [illegible] 1994 [illegible]

[illegible] 36.

[illegible]

[illegible] :

1- [illegible] Oscillograph [illegible][301]

« [illegible] ».[302]

« [illegible] ».[303]

2- [illegible] Raph-sound spectray:

[illegible] recording paper [illegible] microphone [illegible] « Removing drum [illegible] »[304] [illegible] ».[305]

« [illegible] :

1. [illegible] 4.

2. [illegible] 8000.

301- [illegible] 100.

302- [illegible] 55.

303- [illegible] 1986 [illegible] 34.

304- [illegible]

305- [illegible] 1985 [illegible] 140.

3. [illegible]

[illegible] Intensity

[illegible] Harmonics

[illegible] Digital

[illegible][306]

[illegible]

[illegible] Sound forge

[illegible] CoolEdit [illegible] Nero sound ... [illegible]

[illegible] Raven [illegible] Phonedit [illegible]

[illegible] Spectrogram analyseur ... [illegible]

306 - [illegible] 2000 [illegible] 326.

المبحث الثانـي

الدراسة الفيزيولوجية للصوامت الشديدة.

المطلب الأول: أساسيات الدراسة.

المطلب الثانـي:مخارج الصوامت الشديدة.

المطلب الثالث:صفات الصوامت الشديدة.

المبحث الثاني: الدراسة الفيزيولوجية للصوامت الشديدة.

[illegible]:

[illegible][307] [illegible]

[illegible]:

- [illegible]: ([illegible]). [kataba]
- [illegible]: ([illegible]). [madaha]
- [illegible]: ([illegible]). [hatala]
- [illegible]: ([illegible]). [madaga]

[illegible]

[illegible] ([illegible]).

[illegible].

[illegible]: [illegible] 1974 .

[illegible] 1977.

[illegible].

307- [illegible] 1990 [illegible] 180.

[illegible]

308 [illegible] 1998 [illegible] .21

309 [illegible] 1994 [illegible] .139

310 - [illegible] 1999 [illegible] .69

[illegible] .[311] [illegible]

[illegible] (x) [illegible] [312] [illegible] .[313] (.) [illegible]

[illegible] , t , d , t : [illegible] [314] [illegible] D.T [illegible] ».[315] [illegible] [316] (_) [illegible]

[illegible]

[illegible] [317] [illegible]

311- [illegible] 60[illegible].

312- [illegible] 2000 : [illegible] 201[illegible].

313- [illegible] 1987: [illegible] 13[illegible]

314- [illegible] 1998 : [illegible] 156[illegible].

315- [illegible] 74[illegible].

316- [illegible] 66[illegible].

Kantner C , Phonetics , USA , 1960, p 312 -317

[illegible]

[illegible]

[illegible] [318] [illegible]

[illegible] [319] [illegible]

[illegible] [320].

[illegible]:

1- [illegible].

2- [illegible].

3- [illegible].

[illegible]: hold [illegible] closure phase [illegible] release phase [illegible] phase [illegible] «the poster release phase» [321] [illegible]

[illegible]

[illegible]

[illegible]

318- [illegible] .53

319- [illegible] 2000 [illegible] .54

320- [illegible] .90

321- Roach ,english phonetics and phonology , a practical cours , 1987, Cambridge university press , cambridge , p 28.

[illegible]

[illegible] [322].

[illegible]

[illegible] [323].

[illegible] [324]

[illegible]

[illegible]

322- [illegible] 249.

323- [illegible] 250.

324- Occonor BETTER ,English pronounciation, Cambridge university press , 1981,cambridge , p 43 .

.253 -325

-326 Tassadit HAOUCHE ,étude radiocinématographique des phonèmes spécifiques a la langue arabe .I P S E 1997 , p 321/325.

.330/327 -327

36-34-32-30 [illegible] [328] [illegible]
[illegible] (146-144-142-140 [illegible]
[illegible]
.[illegible]
35 [illegible] 141 [illegible] 31 [illegible]
- [illegible] (145 [illegible]
[illegible]
[illegible]
.[illegible]
[illegible]
[illegible] (143 [illegible] 33 [illegible] 139 [illegible] 29 [illegible]
[illegible]
.[illegible]

328- [illegible] .329/323 [illegible]

[illegible]

1- [illegible]:

» [illegible]
[illegible] «.[329]

» [illegible] occlusive [illegible] explosive [illegible] explosive [illegible] stop [illegible] «[330]

[illegible] «[331] [illegible]

[illegible] sound forge 8.0 [illegible]

[illegible] ([illegible]).

[illegible]

329- [illegible] 247.
330- [illegible] 1985 [illegible] 375.
331- [illegible] 297.

ROACH ,english phonétics and phonology , p 28. -332

: [illegible]

" [illegible]
[illegible]
[illegible]
17 [illegible]
.(133 [illegible]

- [illegible] : [illegible]
[illegible]
. [illegible]
. (133[illegible] 18 [illegible])

: [illegible]

[illegible]
[illegible]
[illegible]
[illegible]
[illegible] (135 [illegible] 21 [illegible]) [illegible]
135[illegible] 22 [illegible]
.[illegible]

2 -

[333]

[334]

[335]

333 -

334 -

335 - 1999 ... 22

[illegible]:

[illegible]

[illegible] .(130[illegible] 11 [illegible]

[illegible]:

[illegible] 15[illegible]

.(132[illegible]

[illegible]:

[illegible]

.(134[illegible] 19[illegible]

[illegible]:

[illegible]

.(136[illegible] 23[illegible]

[illegible] 336[illegible]

.147[illegible] 40-39-38-37

3 - [illegible]:

[illegible] 337[illegible]

[illegible] 338.

336- [illegible] .130[illegible]

337- [illegible] .63[illegible]

[illegible]

[illegible] (137 [illegible] 26-25 [illegible]

[illegible]

[illegible] 28-27 [illegible]

[illegible] (138 [illegible]

[illegible]

: [illegible] - 4

[illegible] leave [illegible]

[illegible]

338- [illegible] :1986 [illegible] 102

[illegible]
[illegible] .[339]

[illegible]
[illegible].

: [illegible]

[illegible] (130 [illegible] 12 [illegible]
[illegible]
[illegible]
."[illegible]

[illegible]
[illegible]
[illegible]
[illegible].

: [illegible]

(132 [illegible] 16 [illegible]
[illegible]
. "[illegible]"

: [illegible]

20 [illegible]
[illegible] (134
."[illegible]

[illegible]
[illegible]
[illegible].

339- [illegible] 380.

المبحث الثالث

الدارسة الفيزيائية للصوامت الشديدة.

المطلب الأول : دراسة ذبذبات الصوامت الشديدة.

المطلب الثاني : دراسة أطياف الصوامت الشديدة.

المطلب الثالث : مقارنات .

[illegible]:

1- [illegible].

2- [illegible].

[illegible] Sound [illegible] wave [illegible][341] [illegible].

[illegible][342] [illegible] ... [illegible][343].

341- [illegible] 2000 [illegible] 21.

342- [illegible] 164.

343- [illegible] 1998 [illegible] 31.

[illegible]

[illegible] [344] [illegible]

[illegible] sound forge 8.0 .

[illegible]

[illegible]:

[illegible] [kataba] [illegible] 0.120 [illegible] 0.786 [illegible]

[illegible] 0.086 [illegible] 0.034 [illegible] (127 [illegible] 05 [illegible]).

[illegible]:

[illegible] [madaha] [illegible] 0.102 [illegible] 0.870 [illegible] 0.087 [illegible]

---

344 [illegible] 127

.(127î 06 ÒÓî ãã) .Äç0.015 ŋÇÉzóÂDÀqpãÇÝgÀnãÂÛÜ

óÀÞkş ãř Â qÀŤÇĔÅ/ÇĬkzö ğ ÀÈÓzéřzDzÈ ÇäãgÂÇzóäzù ȘgÝqpÜbbÇş

.ÇĤÀÅÅvÀÀ äãÃÉÀÉ ɹzÇkş ÀŤƨãÇĦɜ ÀĚÀkɣãÜȴş ÛĦkzÔãã

:óÂÛãĂKnÀö

ÇÆtÝŏ Òø ž-BÓÞãğ ÀÈÓÞ äÉÓãɿøëóöÝøǹ døǹÀÞ ÛãĂKnÀö â óÆp

ŋÇĖzóÂÛãĂKnÀö ğ ÀÈÓzéÀÛÜÂç0.972 ÀŤãÜbbã ŋÇÃɣÇäzş - [hatala] ÛĵɬŁ –

.Äç0.125 ÀÀãÂÜbbã

ãÀÞÇÜgÀÇzÀÛÂÇç0.101 ÀÓÆĘgÉnŽ ÂDĂKKnÀÔãäÇÝ ÆęãɜnÈ ÇäãgÀÇz

.(128î 07 ÒÓî ãã) .Äç0.024 ŋÇÉzóÂDÀqpãÇÝgÀn

: åÂRãĂKnÀö

ÀŤãÜbbã ŋÇÃɣÇäzş - [madaga] ĽĤĿh ÇĚÝŏ ğ ÀÈÓzéÒž-BÓãɿëÀãŽ

.Äç0.117 ŋÇÂåÂRãĂKnÀö ÇäÛbbã ɹÜÆÐÛÂç0.700

ÛÂç0.097 ÀÓÆĘgÉnŽ ÀÀãÂÜbbã ɹzÒɅKnÀÔãäÇÝ ÇÉnɜnÈ ÇäãgÀÇzş

.(128î 08 ÒÓî ãã).Äç0.020 ŋÇÉzóÂDÀqpãgÉnÀÛ

ÀŢgŕ Ä õ ÀŤƨ ÀäÇö Än ÇĬkzö ğ ÀÈÓzéřzDzÈ ÇäãgÀÇzŽ ȘgÝqpÜbbÇş

gÉÀÊãğ äzö ɟ äÒõ Ž ÀŢĮkğ ÀÈÓÉÕÇÜş ÛbzŤÇäöÀÊãĂKnÀö Ž ÀRɅÛÂåzDzŽ

î Ä äJFÀĚÇãğ zÔãɜnÇÝnÀĔɥ zÇkgózŤÇägɳɅãğ äzö ɟ äŽ ÀÀÉbzŤÇã

.8 ÀŽÀe

[illegible]

[illegible]

[illegible] [345] «sound spectrogram [illegible]

[illegible] RAVEN 1.2 [illegible]

[illegible]

[illegible]

[illegible] 125 [illegible] 01 [illegible] - [kataba] [illegible]

[illegible] 0.086 [illegible]

[illegible] 0.034 [illegible]

[illegible]

1 - [illegible] Hz 743 [illegible]
[illegible] dB 117 * dB122 [illegible].

2 - [illegible] Hz1650 [illegible] Hz1836 [illegible]
[illegible] dB105 [illegible] dB111.

345 - [illegible] 42.

* - [illegible] Raven 1.2

Hz 2875 و Hz2749 [illegible] 3-

.dB104.7 و dB 102 [illegible]

[illegible]

: [illegible]

Hz 771 [illegible] : 1^er formant (F_1) [illegible] 1-

.dB 118 و dB 124.9 [illegible]

[illegible] 2^ème formant (F_2) [illegible] 2-

.dB113 و dB105 [illegible] Hz 1839 و Hz1620

[illegible] 3^ème formant (F_3) [illegible] 3-

dB 105 [illegible] Hz 2612 و Hz2715

.dB108 و

[illegible]

Hz5600 و Hz 4774 [illegible]

.dB93.1 [illegible]

: [illegible]

[illegible]

[illegible] (125 02 [illegible] - [madaha] [illegible]

[illegible] 0.087 [illegible]

[illegible]

[illegible]

.dB109 [illegible] Hz 630

[illegible]

: [illegible] 0.015 [illegible]

[illegible] Hz 657 [illegible] 1-

.dB122.5 و dB111

[illegible] 2-

.dB106 و dB103 [illegible] Hz 1905 و Hz1708

Hz2869 [illegible] 3 -

[illegible] .dB104.1 [illegible] dB102 [illegible] Hz 3022 [illegible]

[illegible]

: [illegible]

[illegible] Hz 805 [illegible] : 1er formant (F_1) [illegible] 1 -

.dB127 [illegible] dB111 [illegible]

[illegible] : 2ème formant (F_2) [illegible] 2 -

dB106 [illegible] Hz1672 [illegible] Hz1394

.dB112 [illegible]

[illegible] : 3ème formant (F_3) [illegible] 3 -

.dB108 [illegible] dB104 [illegible] Hz2911 [illegible] Hz2694

[illegible]

. [illegible]

: [illegible]

- [hatala] [illegible]

[illegible] 0.101 [illegible] (126 [illegible] 03 [illegible]

[illegible]

. [illegible]

[illegible]

: [illegible] .[illegible] 0.024 [illegible]

[illegible] Hz 712 [illegible] : [illegible] 1 -

. dB120 [illegible] dB109 [illegible]

Hz1053 [illegible] : [illegible] 2 -

. dB116.7 [illegible] dB109 [illegible] Hz1301 [illegible]

Hz 2539 [illegible] : [illegible] 3 -

. dB103 [illegible] dB97 [illegible] Hz 2725 [illegible]

[illegible]

: [illegible]

120.4 [illegible] : 1er formant (F_1) [illegible] 1
.dB121 [illegible] dB114 [illegible] Hz

[illegible] : 2ème formant (F_2) [illegible] 2
[illegible] Hz2650 [illegible] Hz2496
.dB105 [illegible] dB102.8

Hz3241 [illegible] : 3ème formant (F_3) [illegible] 3
[illegible] Hz 3372 [illegible]
. dB104.2 [illegible] dB102

[illegible]
[illegible] Hz 5500 [illegible]
.dB 92 [illegible]

: [illegible]

[illegible]
[illegible] 0.097 [illegible] (126î 04 [illegible] - [madaga] [illegible]
[illegible]
[illegible]
Hz541 [illegible]
.dB109 [illegible]
[illegible]
: [illegible] 0.020 [illegible]

[illegible] Hz988 [illegible] : [illegible] 1
. dB124 [illegible] dB112 [illegible]

Hz2836 [illegible] 2
.dB93 [illegible] dB90 [illegible] Hz3155 [illegible]

Hz3569 [illegible] : [illegible] 3
.dB 99 [illegible] dB93 [illegible] Hz 3919 [illegible]

: [illegible]

[illegible] Hz 1083 [illegible] : 1er formant (F_1) [illegible] 1
. dB125 [illegible] dB112 [illegible]

[illegible] : 2ème formant (F_2) [illegible] 2
. dB104 [illegible] dB100.5 [illegible] Hz 3027 [illegible] Hz2804

[illegible] : 3ème formant (F_3) [illegible] 3
.dB110 [illegible] dB105 [illegible] Hz3856 [illegible] Hz3537

[illegible]
. [illegible]

[illegible]
[illegible]

s [illegible]		dB [illegible]	Hz [illegible]	[illegible]	
0.034	[illegible]	122 - 117	743	1[illegible]	[illegible]
0.086	[illegible]	111-105	1836 -1650	2[illegible]	
		104.7 - 102	2875 -2749	3[illegible]	
0.087	[illegible]	122.5 - 111	657	1[illegible]	[illegible]
0.015	[illegible]	106 - 103	1905 -1708	2[illegible]	
		104.1 - 102	3022 -2869	3[illegible]	
0.101	[illegible]	120 - 109	712	1[illegible]	[illegible]
0.024	[illegible]	116.7 - 109	1301 -1053	2[illegible]	
		103 - 97	2725 - 2539	3[illegible]	
0.097	[illegible]	124 - 112	988	1[illegible]	[illegible]
0.020	[illegible]	93 -90	3155 -2836	2[illegible]	
		99 - 93	3919 - 3569	3[illegible]	

[illegible]
[illegible]

dB [illegible]	Hz [illegible]	[illegible]	
118-124.9	771	1[illegible]	[illegible]
113-105	1839-1620	2[illegible]	
108- 105	2612-2715	3[illegible]	
127- 111	805	1[illegible]	[illegible]
112- 106	1672-1394	2[illegible]	
108- 104	2911-2694	3[illegible]	
121- 114	1204	1[illegible]	[illegible]
105- 102.8	2650-2496	2[illegible]	
104.2- 102	3372-3241	3[illegible]	
125- 112	1083	1[illegible]	[illegible]
104-100.5	3027-2804	2[illegible]	
110- 105	3856-3537	3[illegible]	

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

1 - [illegible]

2 - [illegible]

3 - [illegible]

4 - [illegible]

5 - [illegible]

6 - [illegible]

7 - [illegible]

[illegible]

1 [illegible]

2 [illegible]

3 [illegible]

4 [illegible]

5

6

7

- 1

- 2

- 3

- 4

5- [illegible]

6- [illegible]

7- [illegible]

[illegible]:

1- [illegible]

2- [illegible]

3- [illegible]

4- [illegible]

5- [illegible]

6- [illegible]

[illegible]

-7 [illegible]

-8 [illegible]

-9 [illegible]

-10 [illegible]

-11 [illegible]

ا لفصل الرابـع

الصوامت الشديدة بين وصف القدامى والمحدثين.

المبحث الأول : من حيث المخارج .
المبحث الثاني: من حيث الصفات .

المبحث الأول

من حيث المخارج.

المطلب الأول: في تعريفهم للمخارج وتحديدهم لها.

المطلب الثاني: في مخرج التاء والدال والطاء.

المطلب الثالث: في مخرج الضاد.

المبحث الأول: من حيث المخارج.

[illegible]

[illegible]

346 [illegible] 56/55 [illegible].

347 [illegible] 124 [illegible].

349- .47

350- .433

351- .253

352- 2001

353- 1966

354- ... .67
355- 255/254
356- ... .40
357- ... .42

[illegible] [358]

[illegible] [359]

[illegible]

1- [illegible]

2- [illegible]

3- [illegible]

4- [illegible]

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6- [illegible]

7- [illegible] [360].

[illegible] [361]

[illegible]

358- [illegible] 2000: [illegible] 155.

359- W- Whiteney ,Life and grouth of language , London, 1980, p 48

360- [illegible] 186/204.

361- [illegible] 1997: [illegible] 18.

المبحث الثاني

من حيث الصفات.

المطلب الأول: في تعريفهم للصفات وتحديدهم لها.

المطلب الثاني: في الصفات المتقابلة.

المطلب الثالث: في الصفات غير المتقابلة.

المبحث الثاني: من حيث الصفات.

[illegible]

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362- [illegible] 270.

363 [illegible] 1995: [illegible] 10.

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[illegible]

364- [illegible] 2000 [illegible] .44

365- [illegible] 2001 [illegible] .44

[illegible]

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[illegible]

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366- [illegible] 434.

367- [illegible] 194.

368- [illegible] 194.

369- [illegible] 247.

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[373] [illegible]

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370- [illegible] .24

371- [illegible] .122

372- [illegible] .434

373- [illegible] .197

374- [illegible] .434

Malmberg Bertil :Phonetics , 1963, new yourk ,p 169.

[illegible] [375] [illegible] [376] [illegible]

[377] [illegible]

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375- [illegible] .102

376- [illegible] .31

377- [illegible] 985 [illegible] .123

378- [illegible] .52

glottalization

glottalized

[380]

3 -

-380 .253/251

381 .136

382 .61

383 .145

[illegible] .[384]

[illegible] .[385]

[illegible]

384- [illegible] .395

385- [illegible] 399

[illegible]

[386] [illegible] .295

[387] [illegible] .378

[388] [illegible] 379

[illegible] [389].

[illegible] [390].

[illegible]

2- [illegible]:

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389- [illegible] .390

390- [illegible].

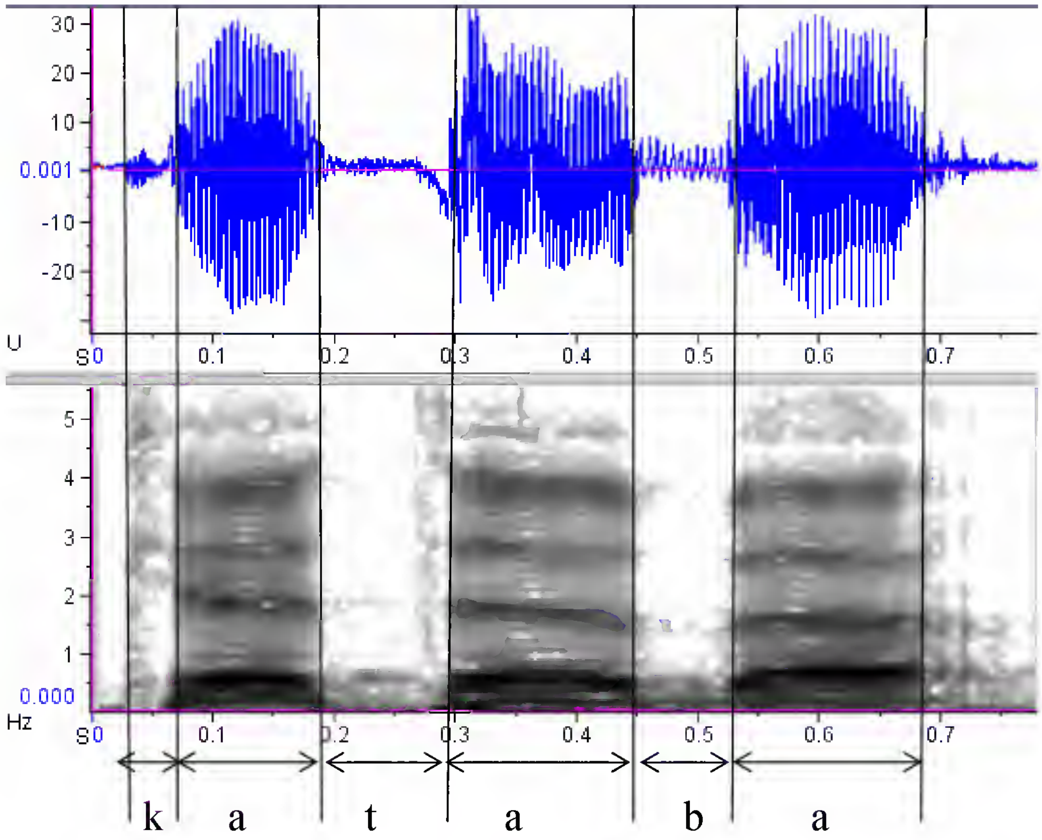
391- [illegible] .13

392- [illegible] .205

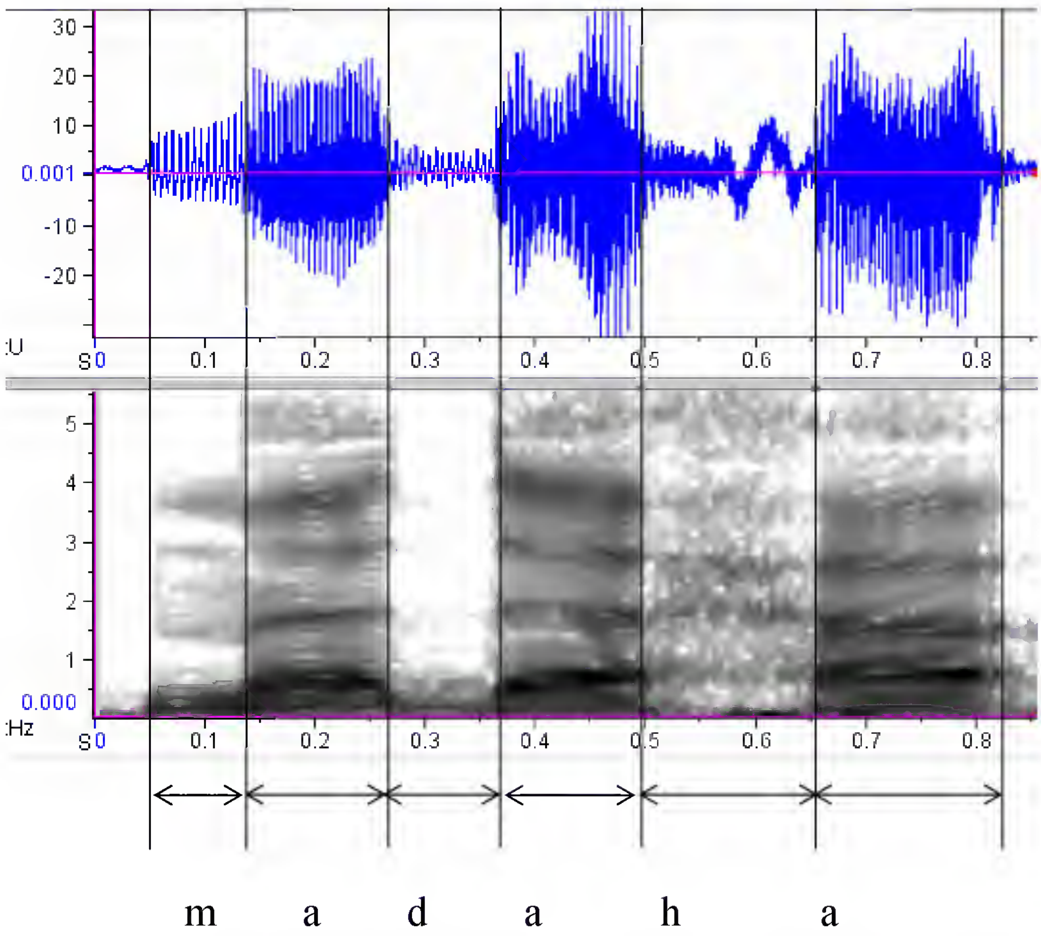
393- [illegible] .405

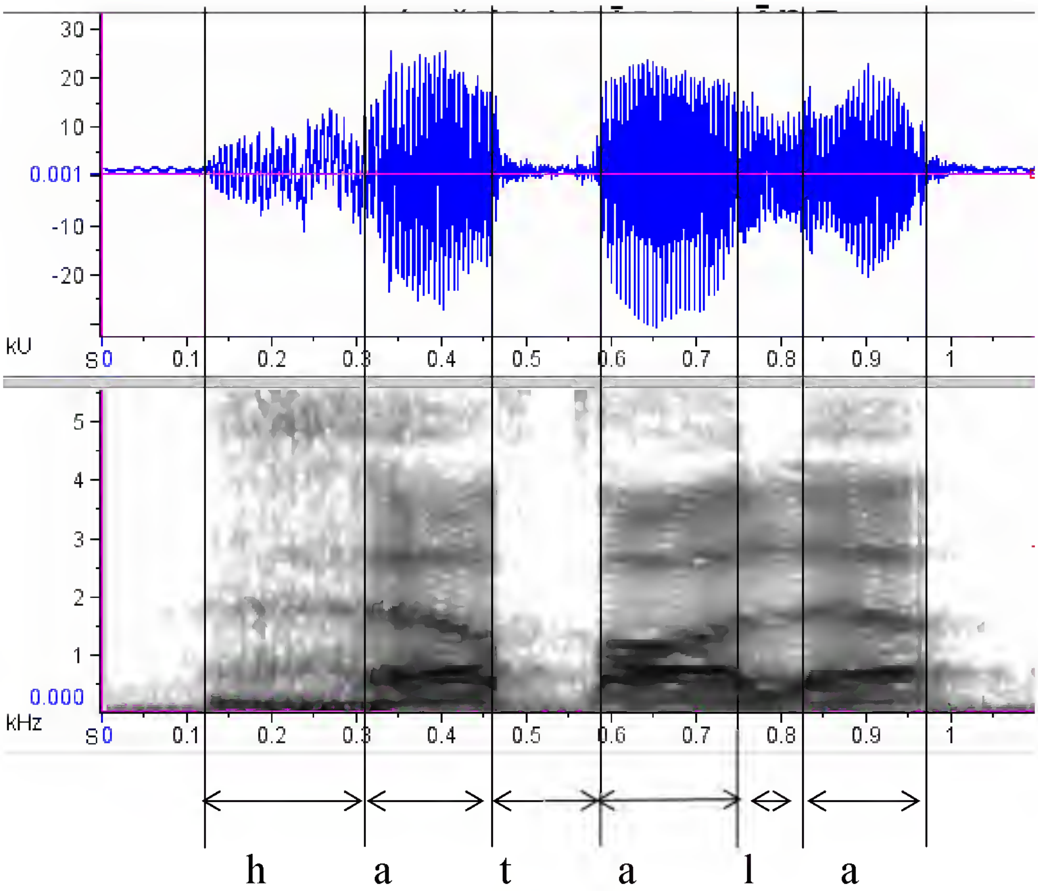
394- [illegible] 10 [illegible] .134

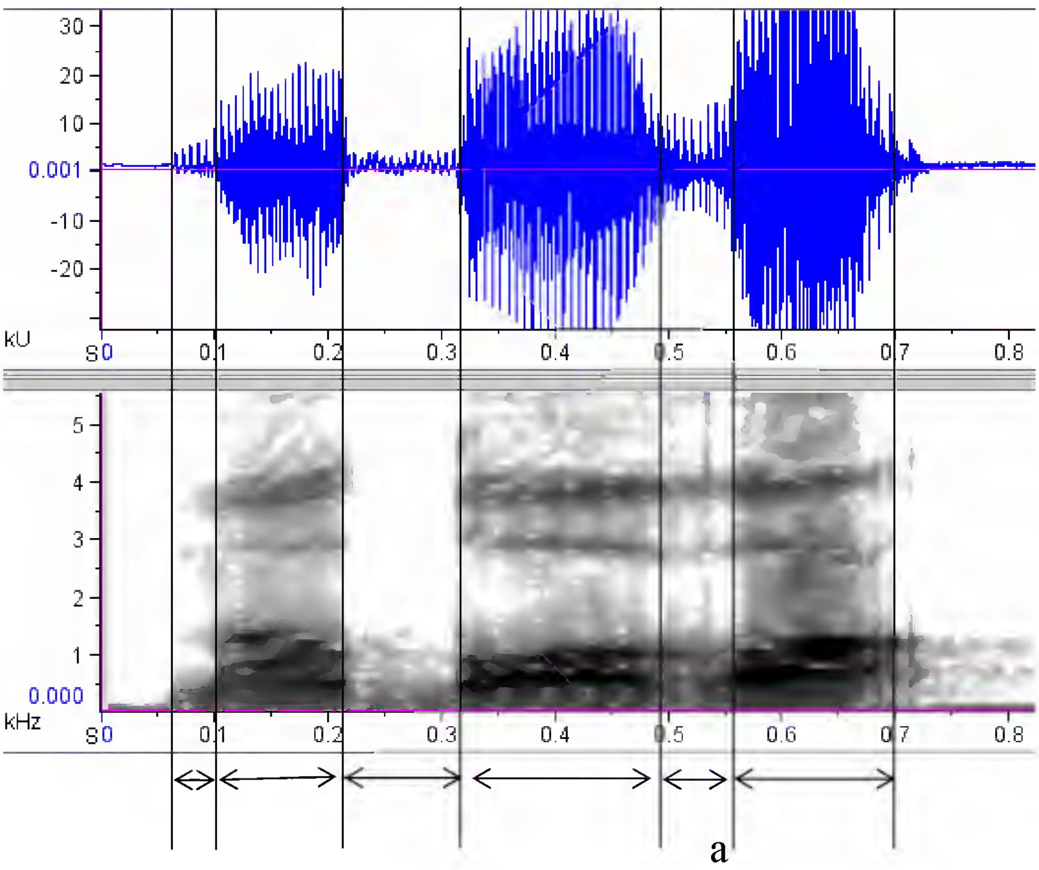
* الملاحق *



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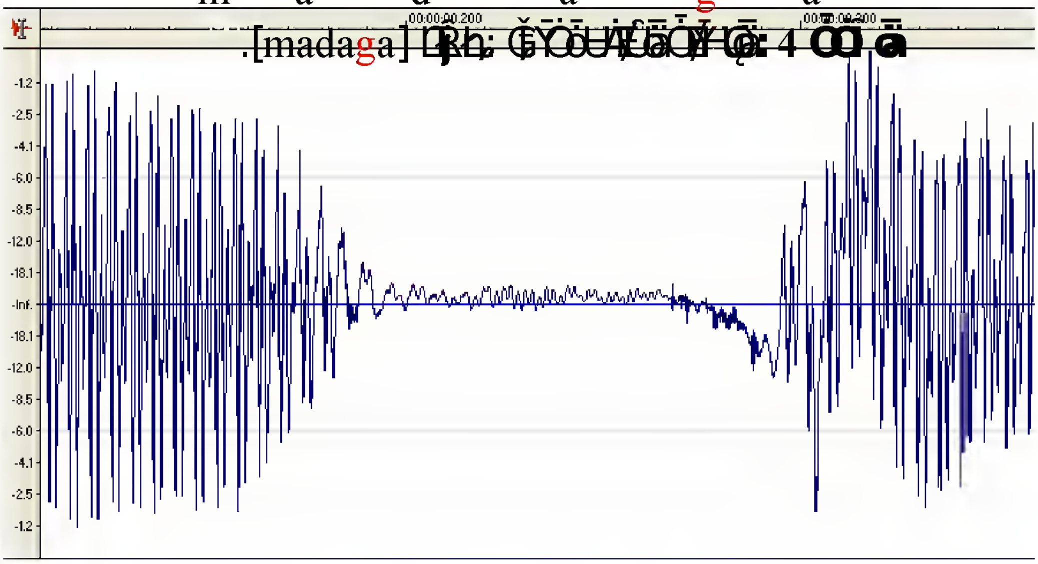

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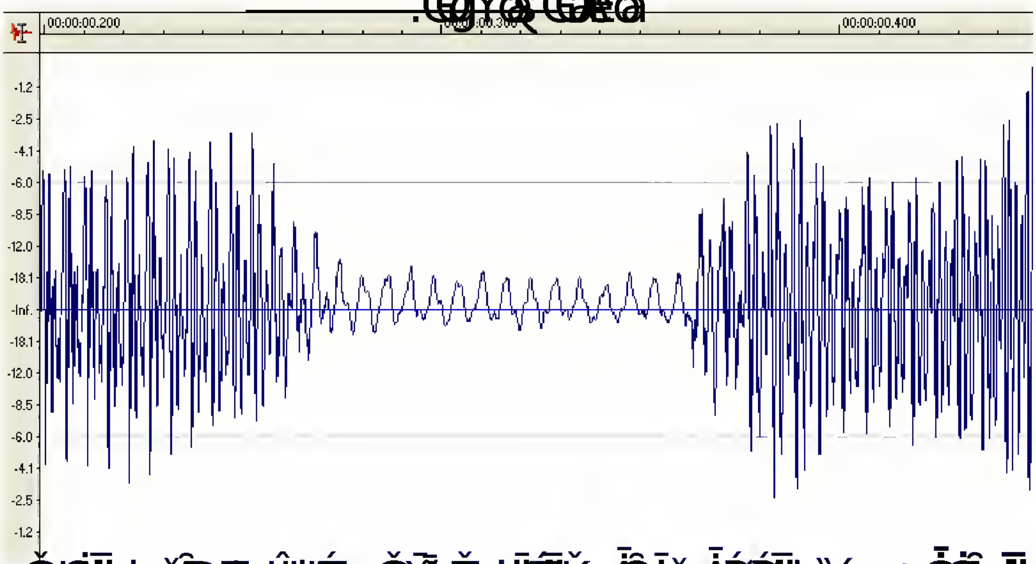
395.[madaga] : 4

m a d a g a

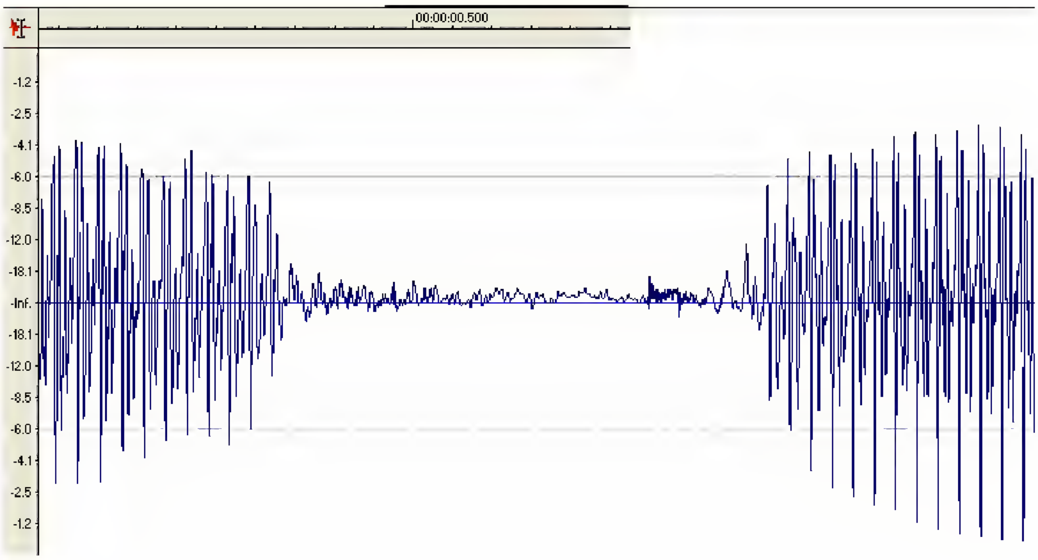
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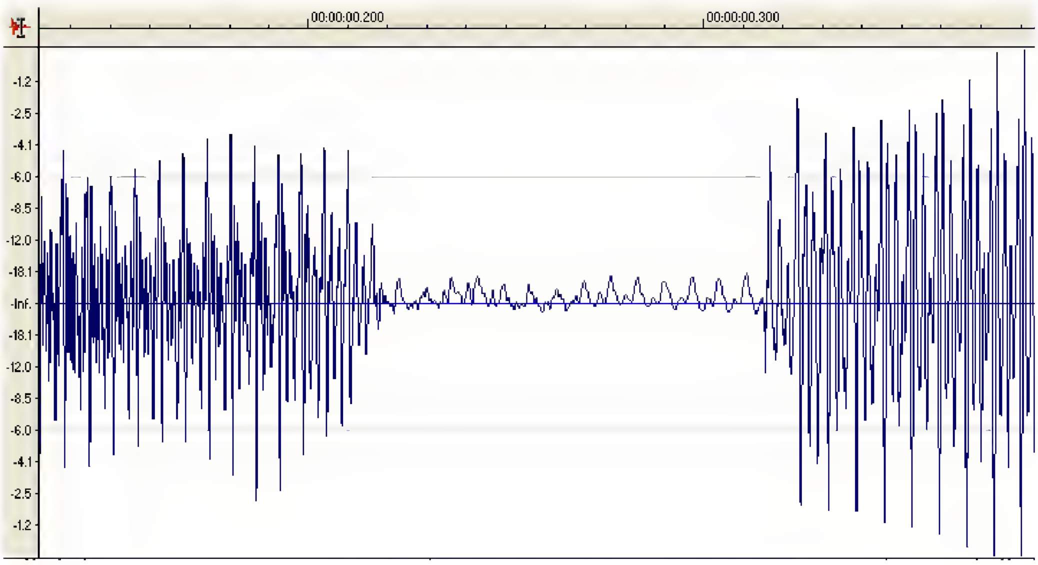
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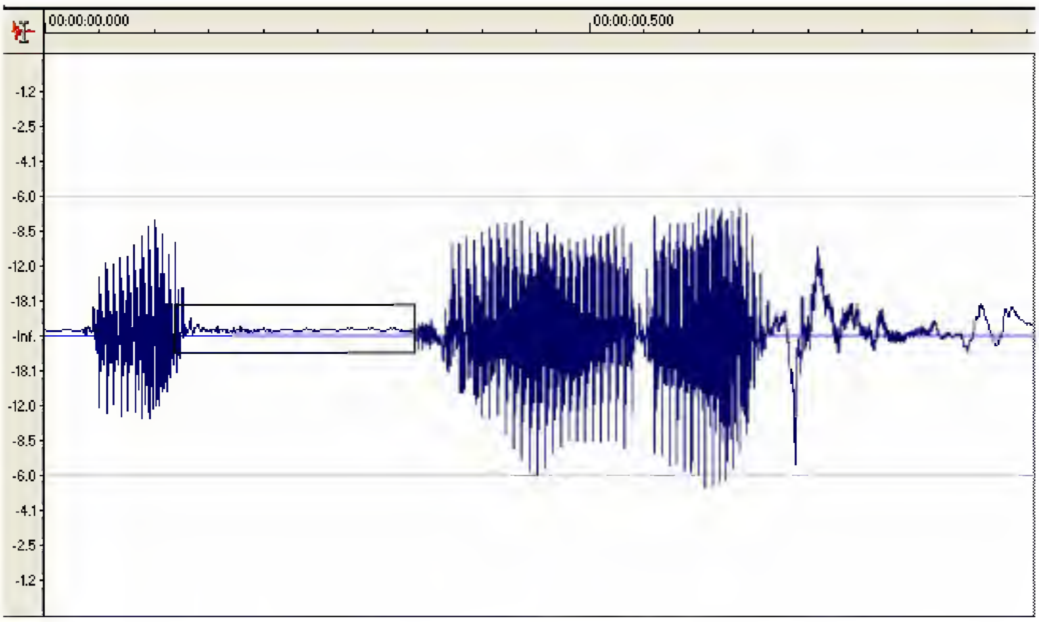
: 6


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-Inf.

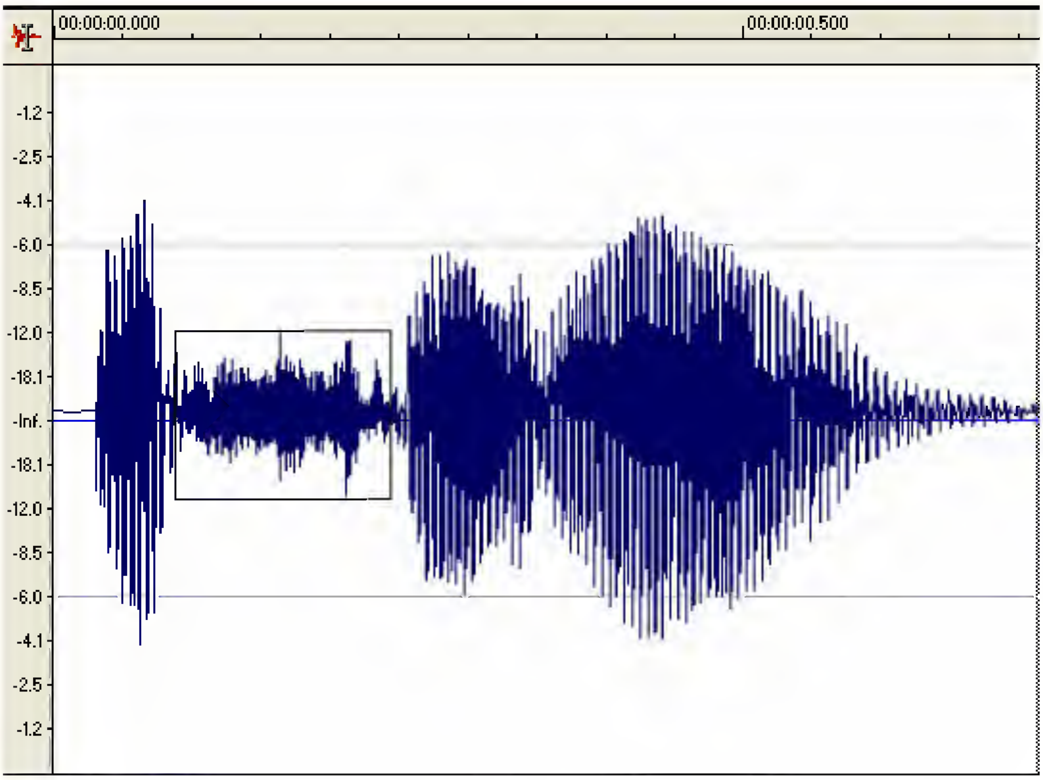
[illegible] : 7 [illegible]


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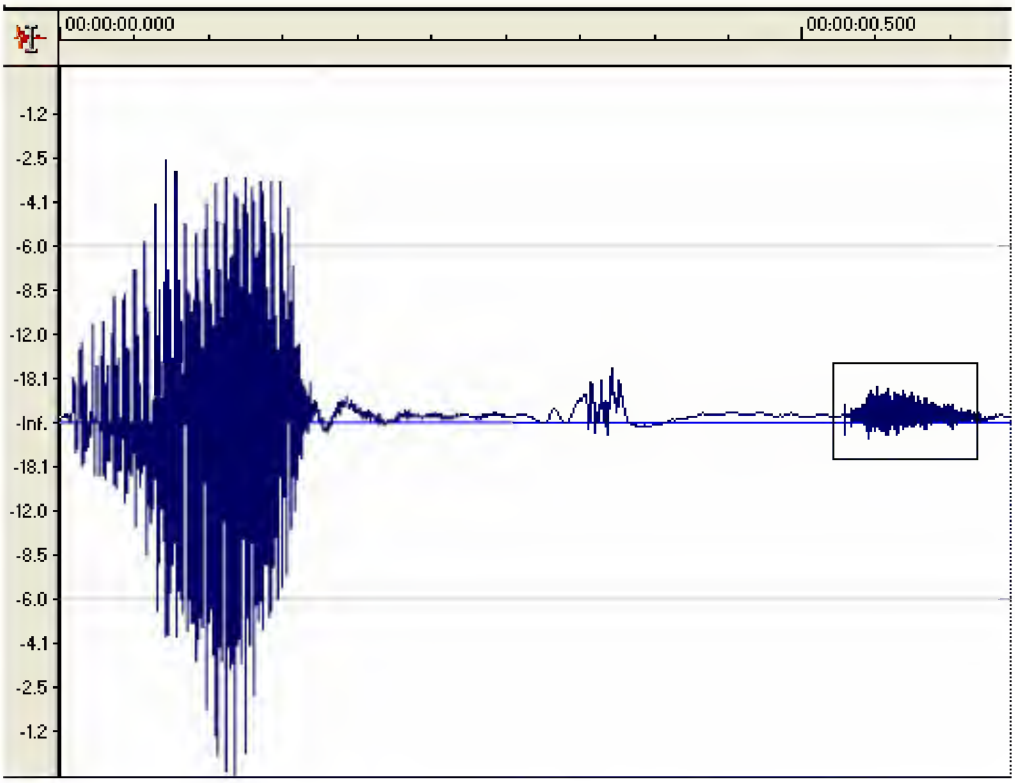

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[illegible] 9 [illegible]

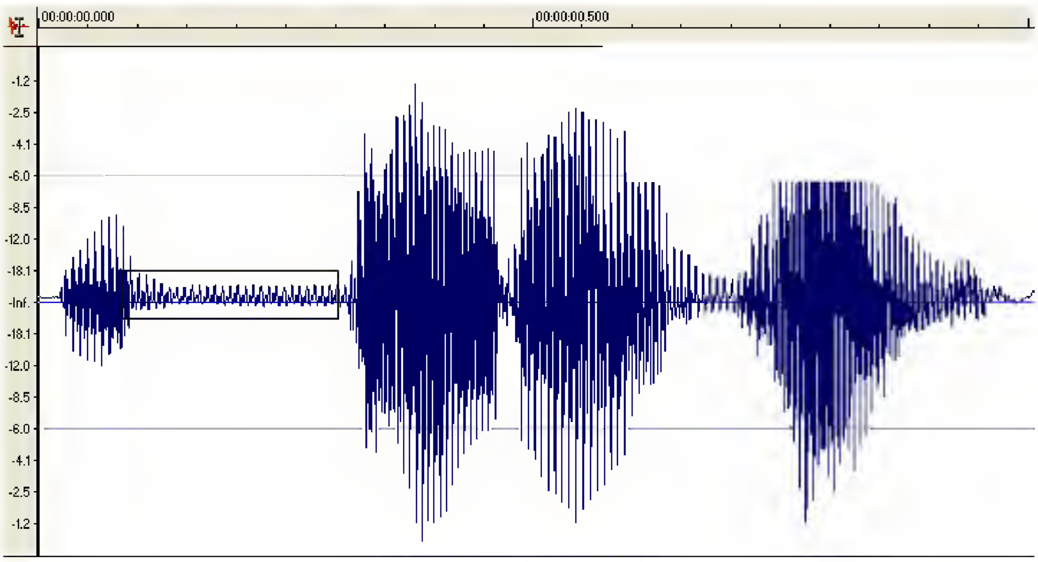

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[illegible] 10 [illegible]

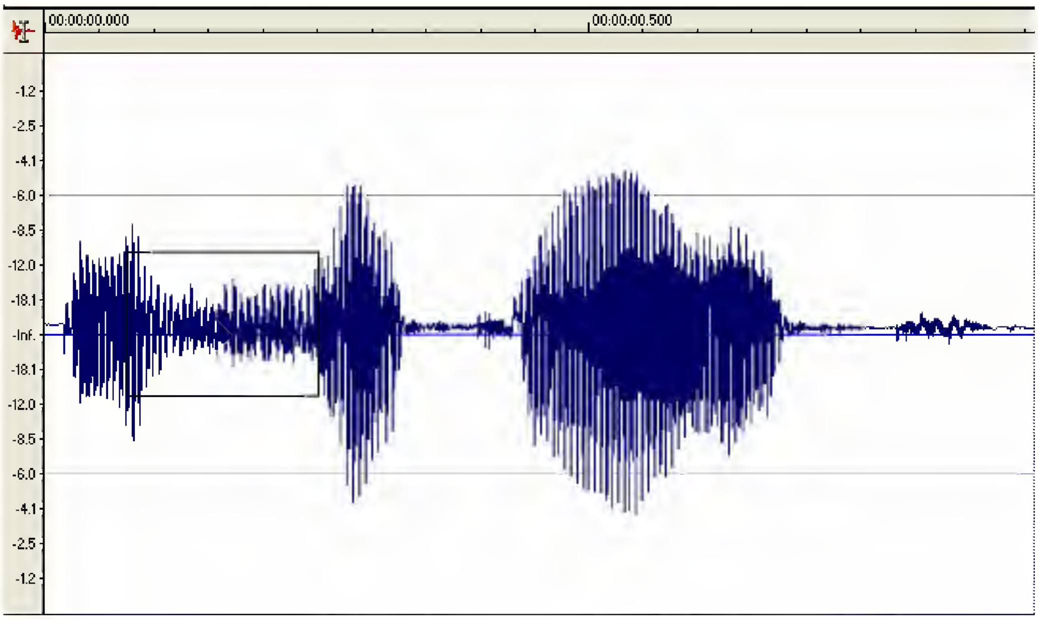
[illegible]



- ŸŶĐŷźŕĢĥăŇẹ : ĢŶ Ž ŏĄŗĶnĄŎġ ĀĂĂĞĿėź: 12 ČĈ ā

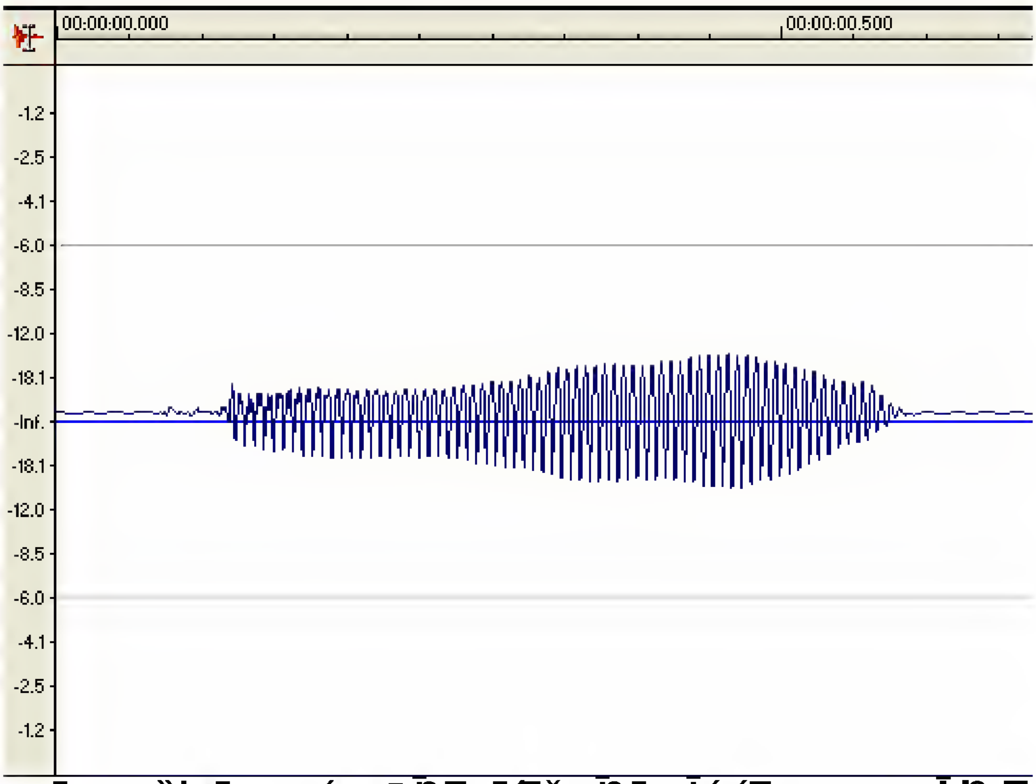


- ģĒăźĄĢăĜŻźĒ: ĢŶ Ž ŏāĔĶnĄŎġ ĀĂĂĞĿėź: 13 ČĈ ā


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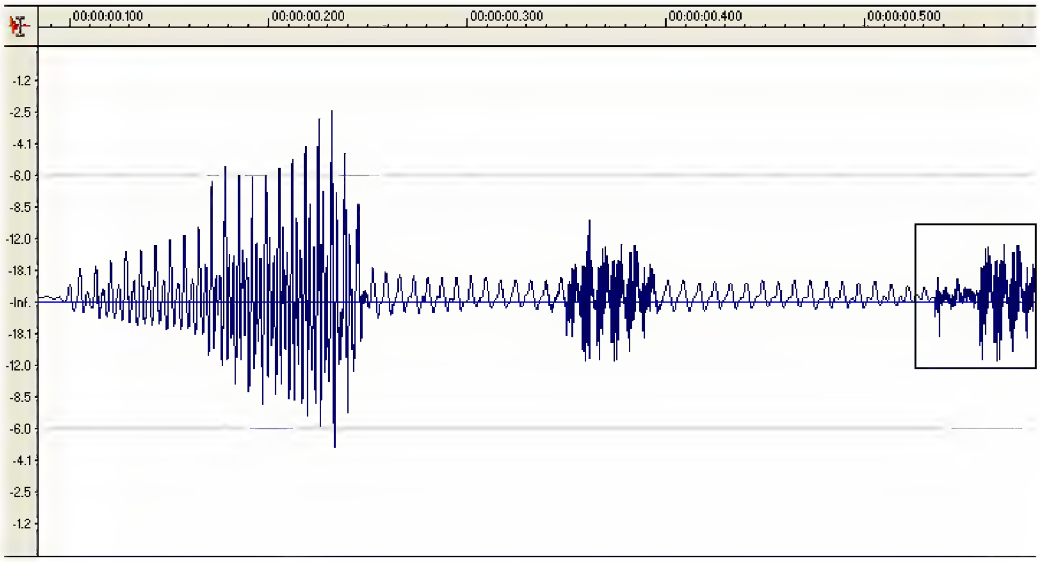
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[illegible]

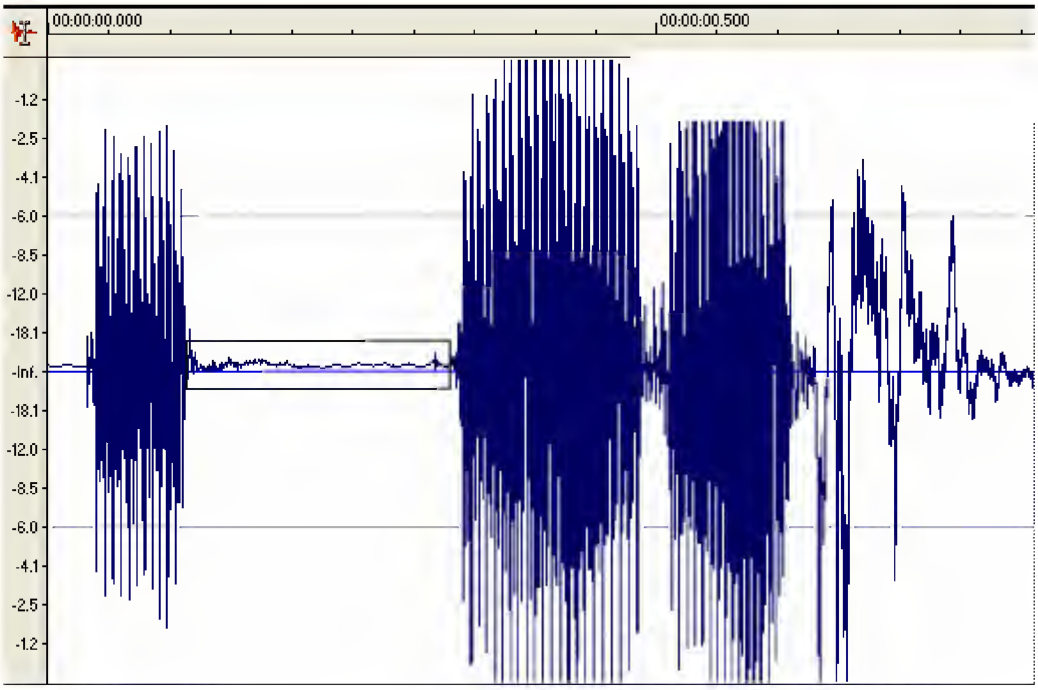

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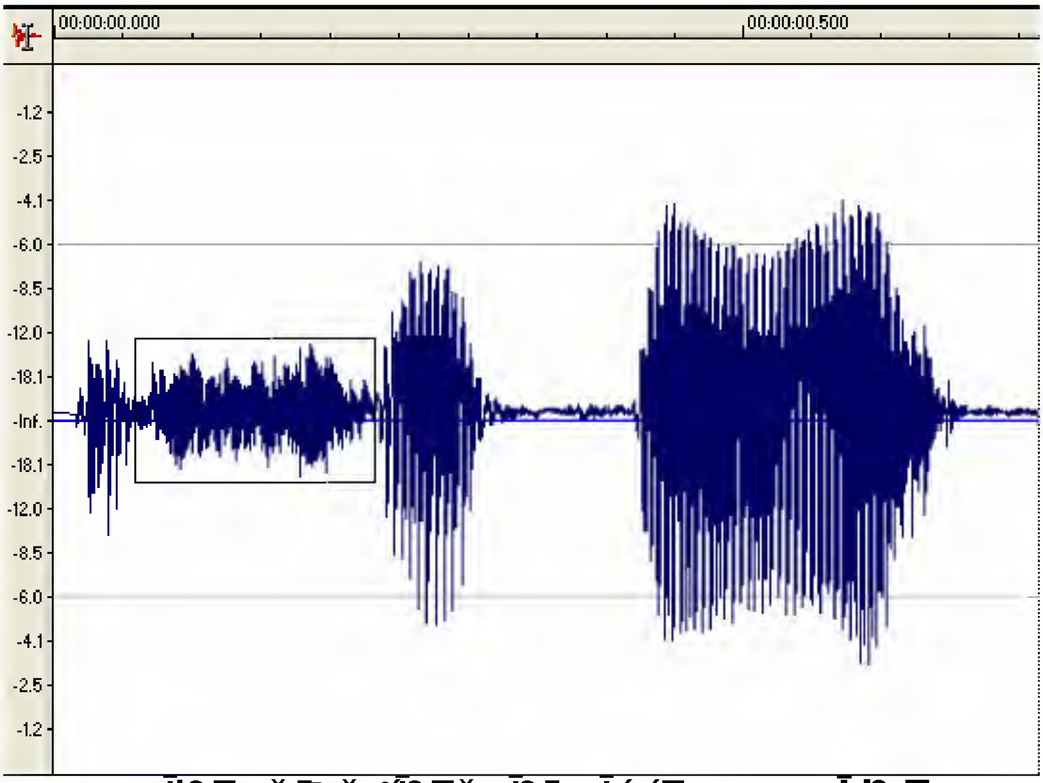
[illegible]


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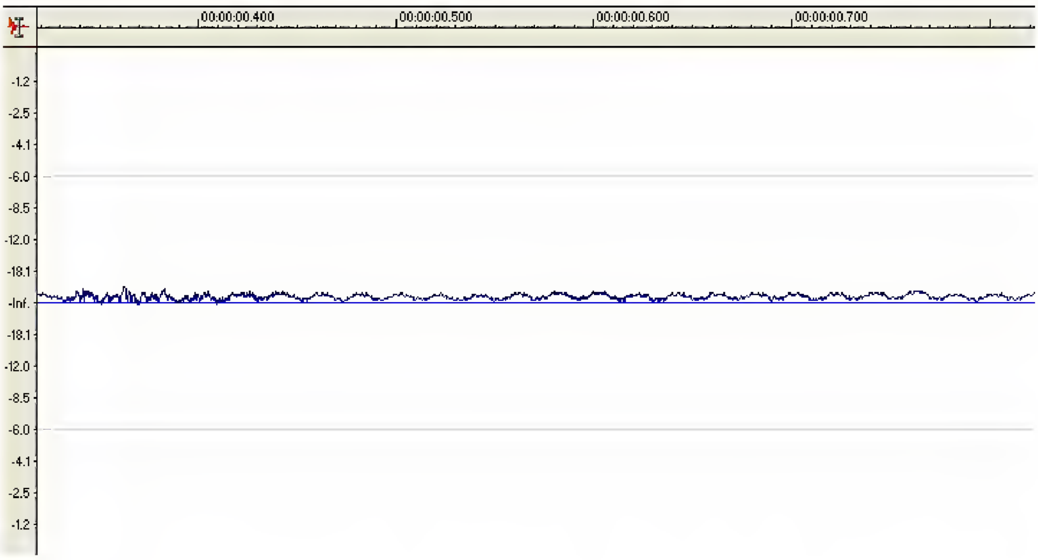
- [illegible]: [illegible] : 16 [illegible]


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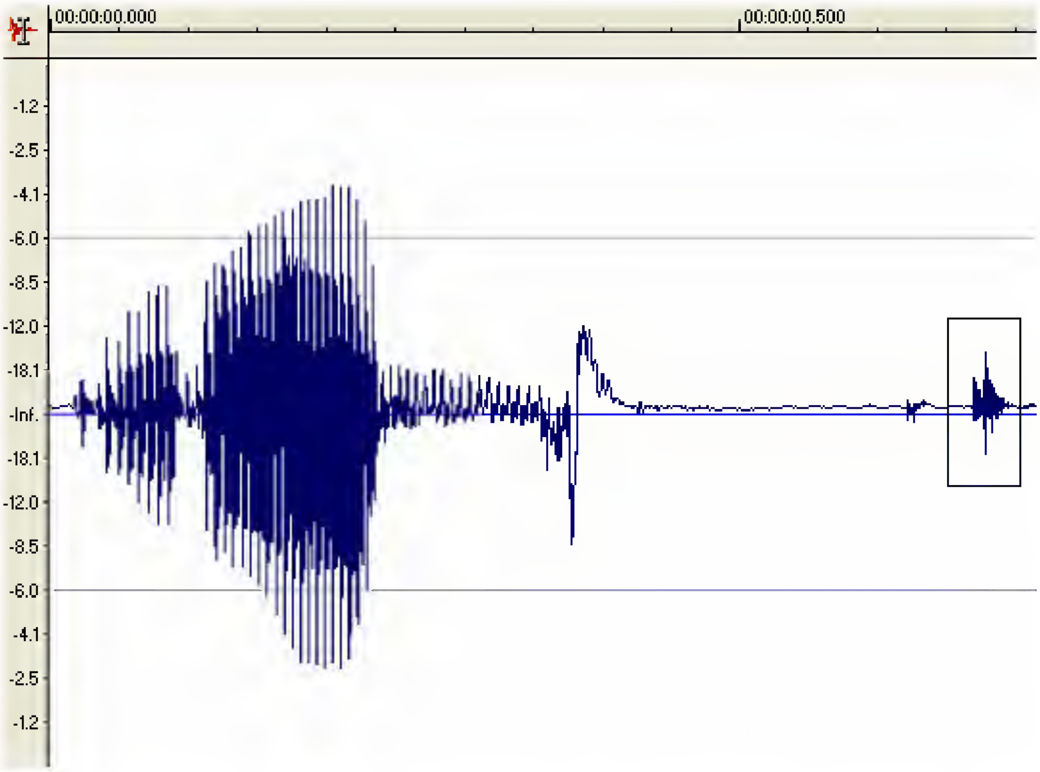
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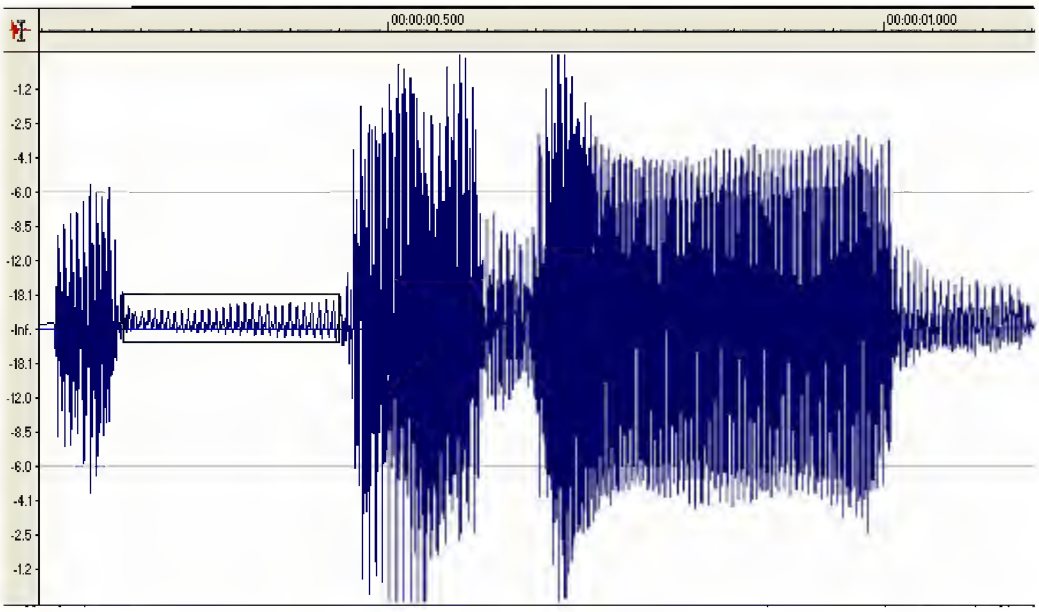
ǒÀÎÛâ: ĢŸ Ž åÔàKnÀÔğ ÀéÂáḁ̀ëé 18 ÒÛ ā
- ćÒàÂǭź àÀàK nÀÔaÆÉàK nÂÔàk àéçÂÛ Ý



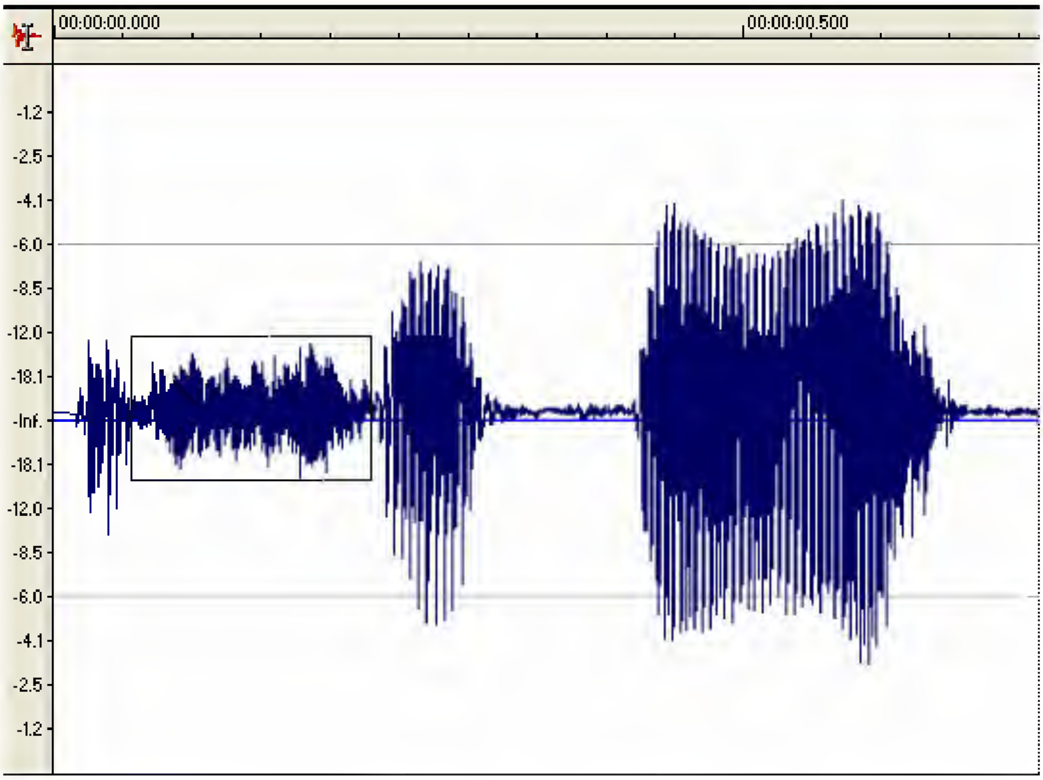
ʔŸ ʒ ȷ ʐʂÀÔĘāʒ ʂ Æʂ dõÂàǒÛàK nÂÔğ ÀéÂáḁ̀ëé: 19 ÒÛ ā
- Ë ţ Tàé ÂḘā – ğÀÔÆā


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- [illegible] : 20 [illegible]

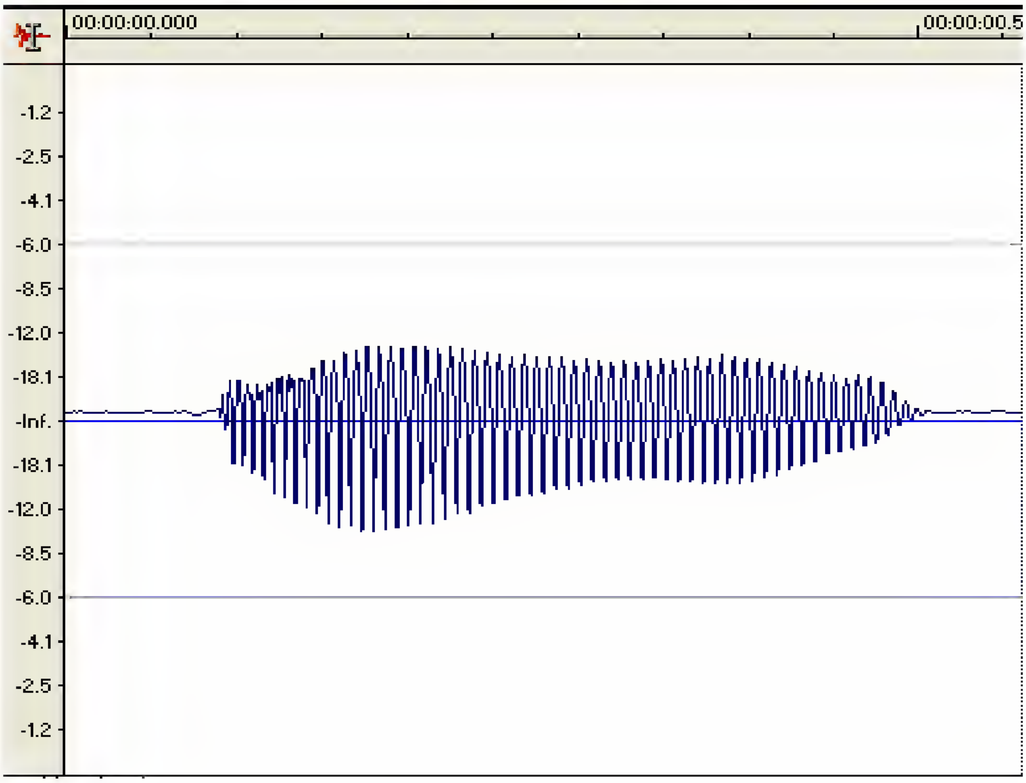

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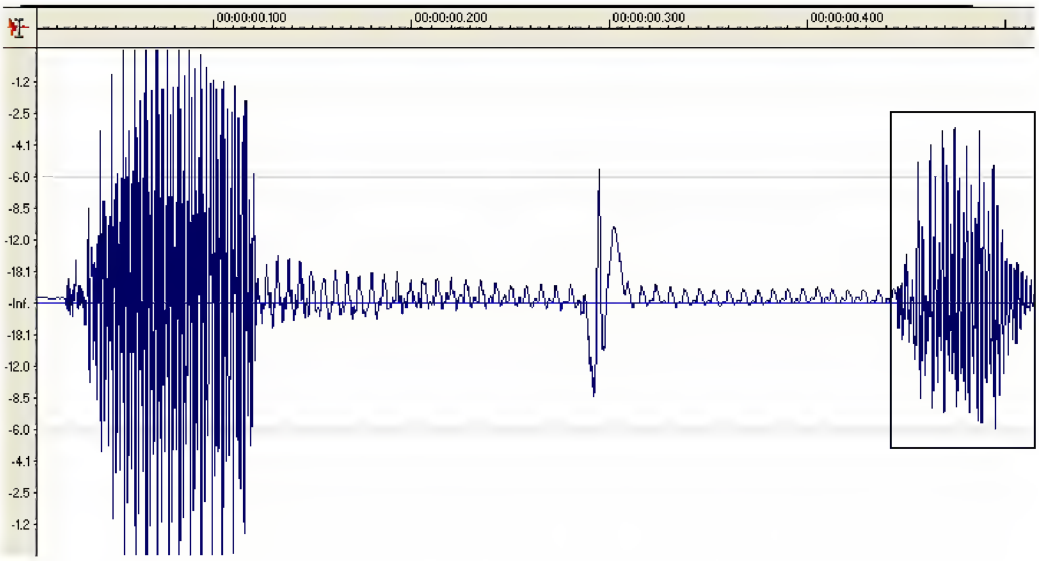
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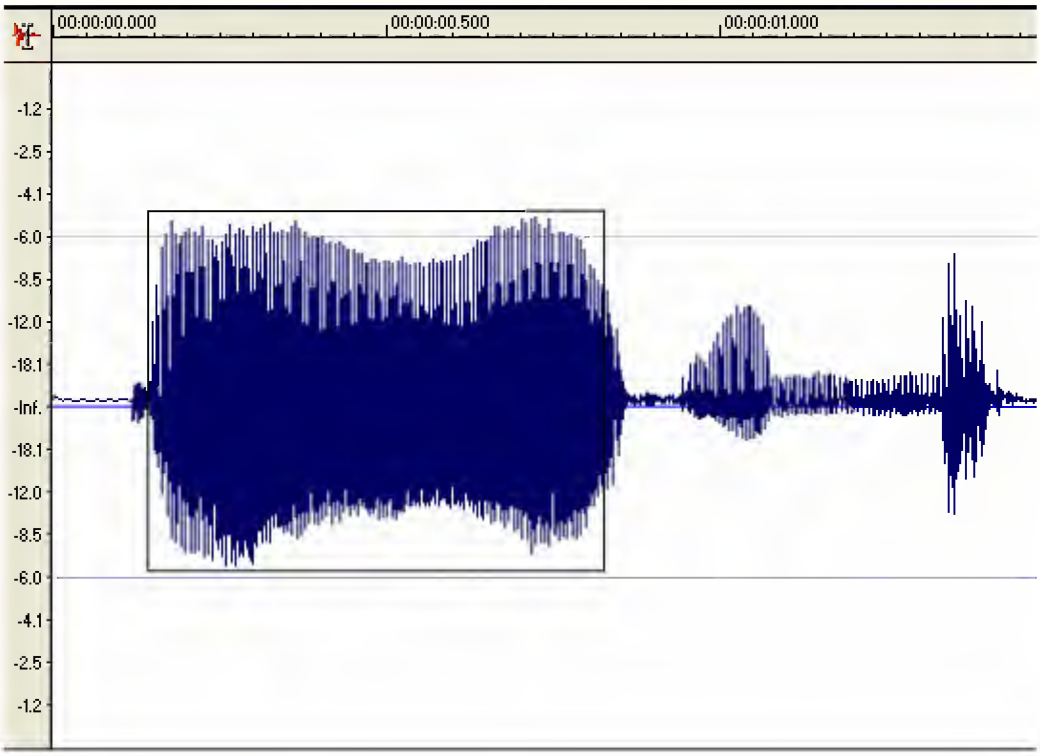
ǒȂ̂ȃä: ǤȲ̃ Ž åȂ̃äǨ nȂ̂ǒ ǧ ȂǿǿȂ̄, ȅǿ: 22 ȮȮ̈ ä

- ǿȮȂ̈Ȃ̄ǯ ǹȂ̀äǨ nȂ̂ä, ȂȂ̂Ȇ äǨ nȂ̂ä ǩ äǿǿȂ̈Ȳ̄ ǒ -

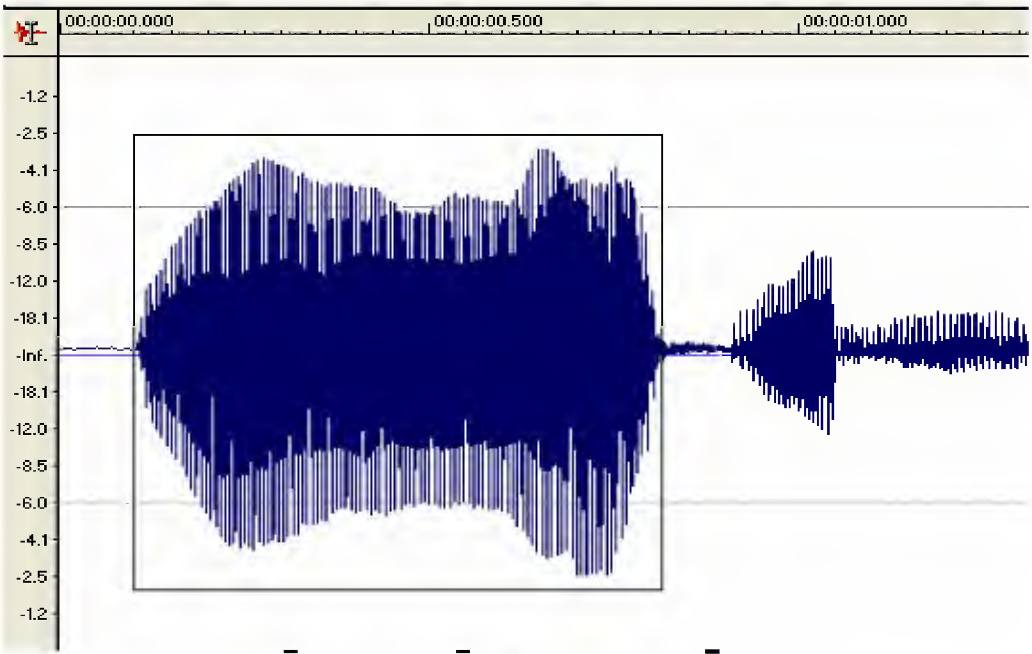




- ŏŸŎŏ¿ÁĢä ŘĢ: ĢŸŏ Ž åŘäK ŋÁŏğ ÁĞĞäLëó: 24 ĊĈî ãä



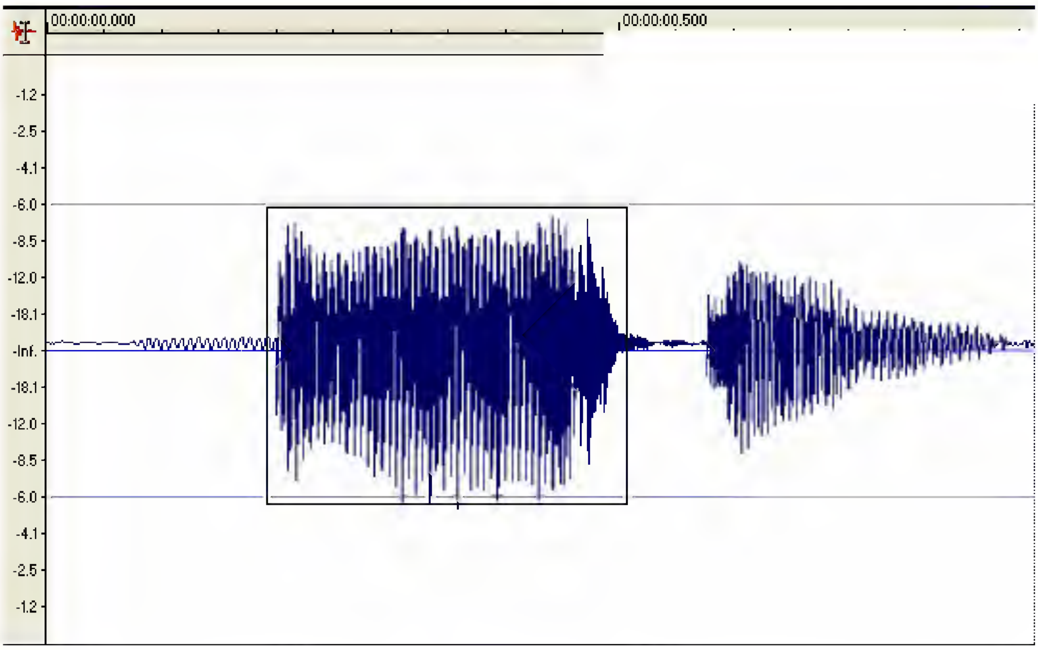
ÆäĂ: ĢŸŏğ ÁĞĞäLëó: 25 ĊĈî ãä


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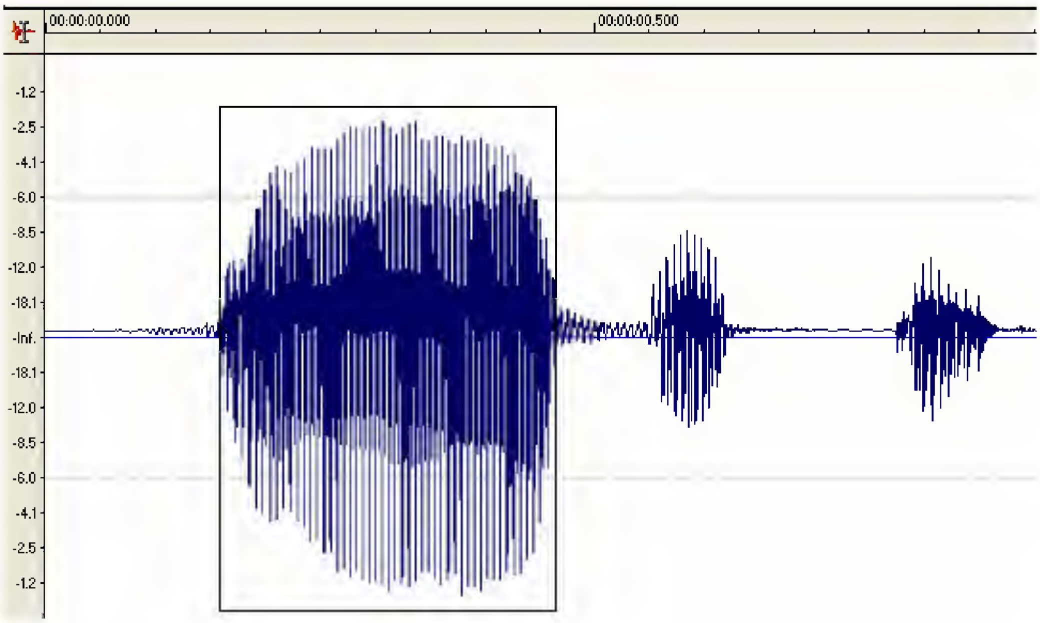
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[illegible]

[illegible]


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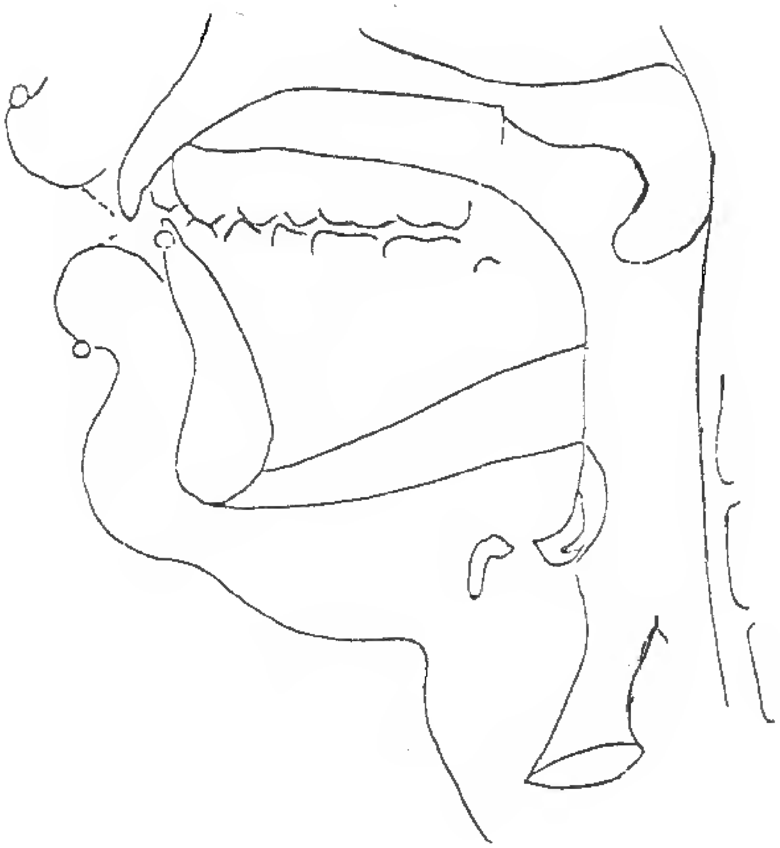
[illegible]: 27 [illegible]



Ùaǻ : ĢŸÒǧ ÁǾǾǾ,ëó: 28 ÒÖÎ ä

ǧ ʐÔäǥÉ Ž ĢÅÀąäåRäĢHǭ ĢÅąäáÉĢHǭk äǿǾŸó

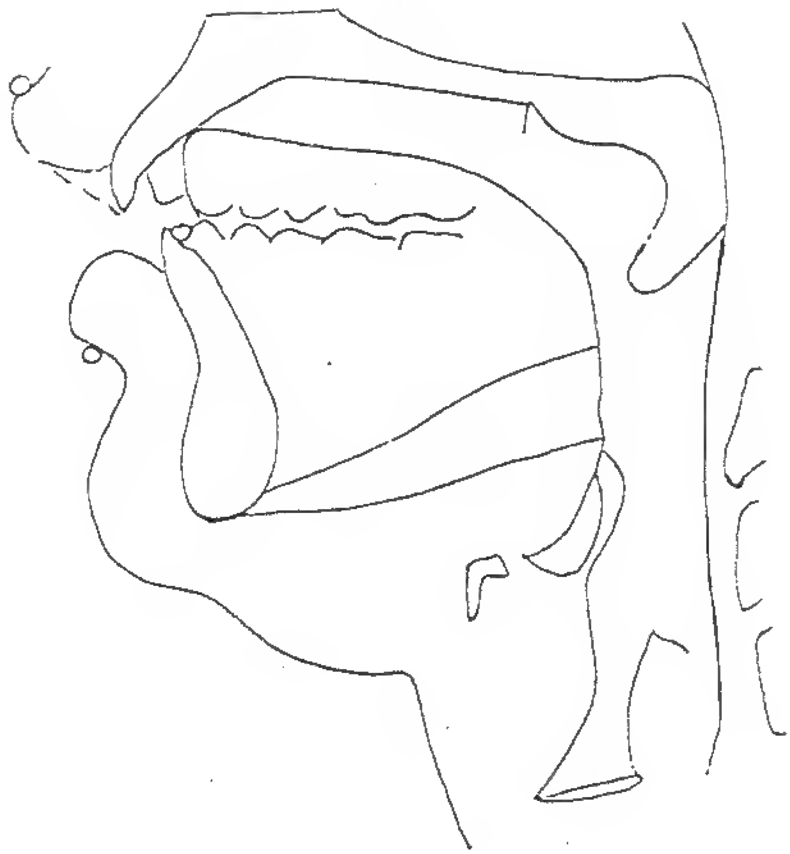
- ÉĄǭ,ÉÅąǿǾǿä



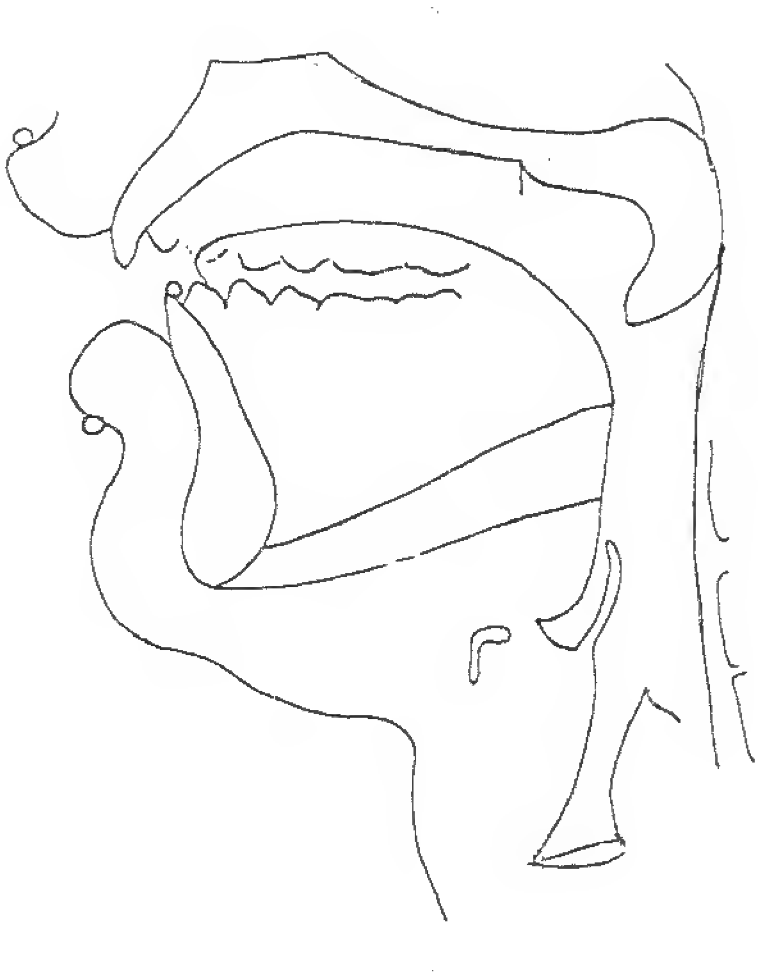
.âÀG¬ ägÀ̈ZŽ ôÀaK nÀ ôâÛÆ ĘÛÄäÀDŹĤ ş: 29 ÒÛî ã



[illegible] 30 : [illegible].[397]



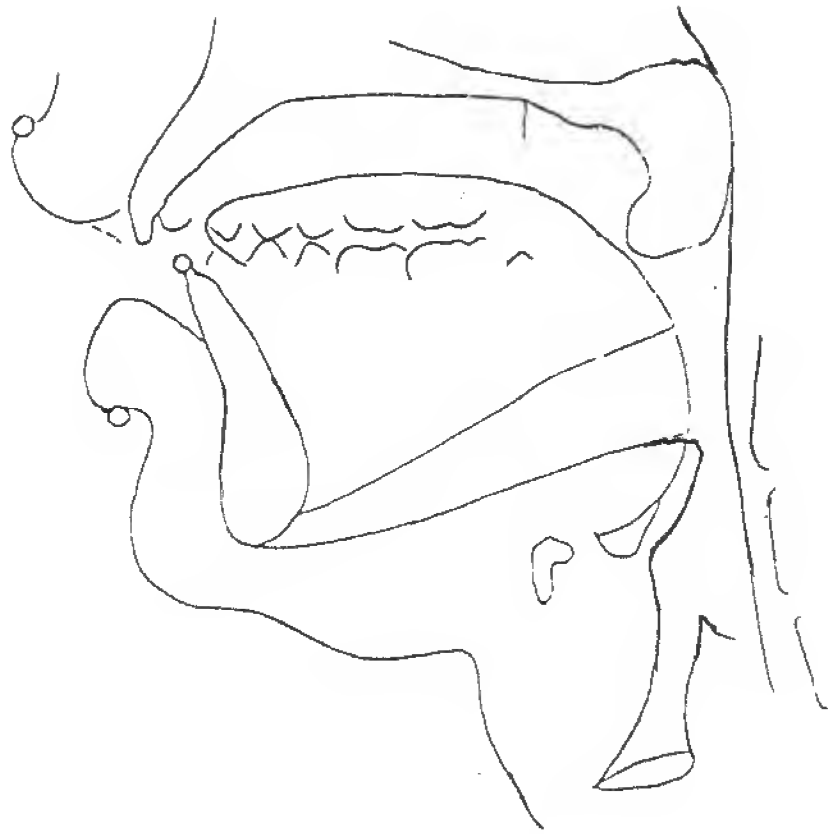
: 31 [illegible]



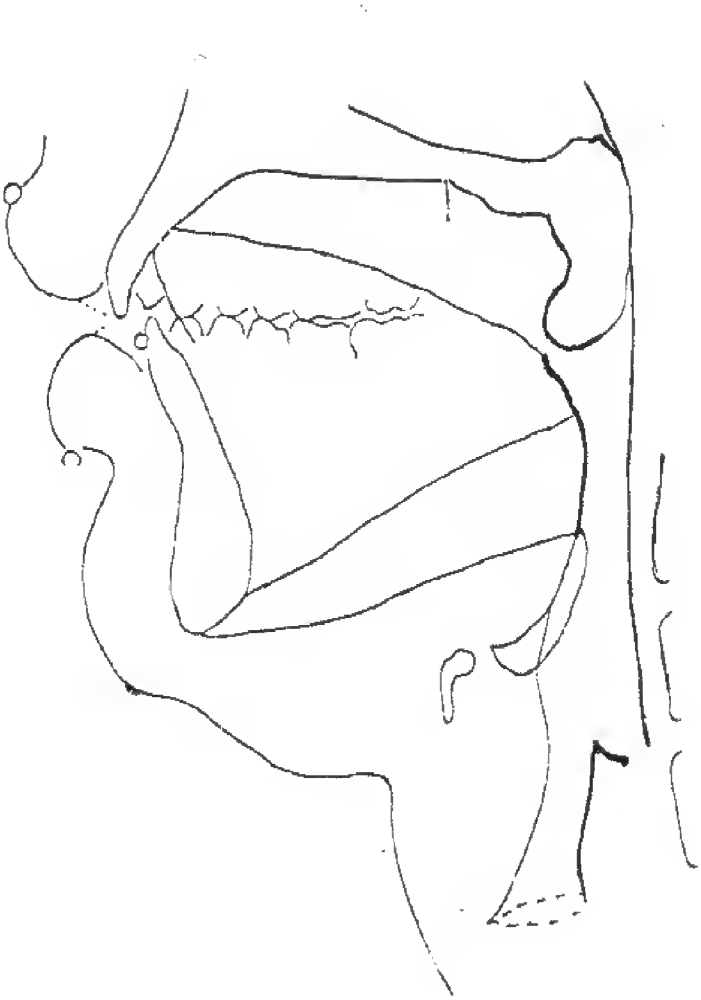
ȯǡǻǡǨ ňǡ ǶǨǴǡǤǫǴǡǡǕǡǷ ǱǕǣǡǡǬȂǡǻ ȋ : 32 ǗǠǡ ǡ



.â ÂGr ägÂQŽ ǒÂUäK nÂ ǒäÛÂ ĘÛÃäÂD ŽÊ ş : 33 ĊÛ ä



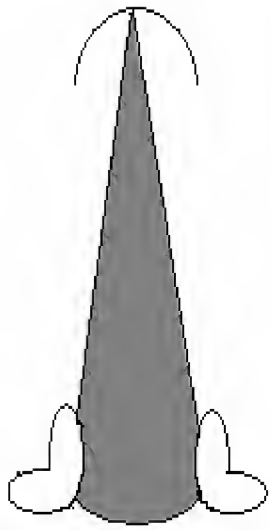
ǒÂǕǚǨ ņȀ ƲǨǷǛǦǾǕǚǕǚǓǗǨ ĘǕǚǕǚǞǻ Ǯǽ ş : 34 ǑǕǖ ǟ



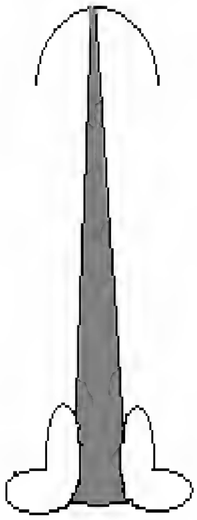
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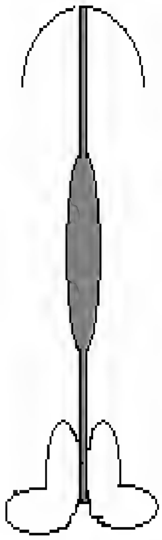
.[illegible] : 36 [illegible]



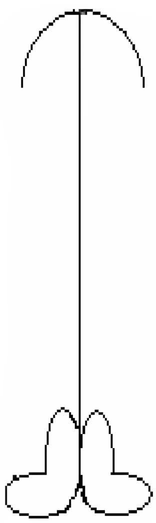
ƙĬĔźÔāäōÄźāČĔĦ ş : 37 ĊĊĨ ā
.BåÄÕōÈ ÀĈāȝ



ƙĬĔźÔāäōÄźāČĔĦ ş : 38 ĊĊĨ ā
.È ţ̧Tāȝ



ƙĬĔźÔāäōÄźāČĔĦ ş : 39 ĊĊĨ ā
.ÄŦźāȝ



ƙĬĔźÔāäōÄźāČĔĦ ş : 40 ĊĊĨ ā
.ĝÂ̧Tāğ ȥö ȝ

5-

6-

7-

8-

9-

10-

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الفهرس

تقديم

الفصل الأول : (مفاهيم أساسية في الصوتيات)

الفصل الرابع : (الصوامت الشديدة بين وصف القدامى والمحدثين)

قائمة المصادر والمراجع باللغة العربية

1- [illegible].

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2- [illegible]: [illegible] 1986 [illegible].

[illegible]:

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4- [illegible]: 1358 [illegible].

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9- [illegible]: 1999 [illegible].

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13- [illegible] 1956 [illegible].

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20- [illegible] :1989 [illegible].

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36- [illegible] 2000 [illegible].

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38- [illegible].

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39- [illegible] 1998 [illegible].

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40- [illegible] 2000 [illegible].

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42- [illegible] 1998 [illegible].

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46- [illegible] 1998 [illegible].

47- [illegible] 1998 [illegible].

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48- [illegible] :2001 [illegible].

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49- [illegible] :1979.

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51- [illegible] 1995 [illegible]: [illegible].

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52- [illegible] :2002 [illegible].

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54- [illegible].

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58- [illegible] 2003 [illegible].

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59- [illegible]: [illegible].

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64- [illegible].

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67- [illegible] :2001 [illegible].

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68- [illegible] :1997 [illegible].

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69- [illegible] :1988 [illegible].

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71- [illegible] :1998 [illegible].

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:[illegible] 74

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:[illegible]

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.[illegible]

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